DOCUMENT RESUME

ED 146 181 TM 006 524

AUTHOR	Armbruster, Frank; Bracken, Paul J.
TITLE	The U.S. Primary and Secondary Educational Process. Final Draft.
INSTITUTION	Hudson Inst., Croton-on-Hudson, N.Y.
SPONS AGENCY	Office of Economic Opportunity, Washington, D.C.
REPORT NO	HI-2308-RR
PUB DATE	14 Jul 75
NOTE	371p.
EDRS PRICE	MF-$0.83 HC-$19.41 Plus Postage.
DESCRIPTORS	*Academic Achievement; Achievement Tests; *Educational Finance; *Educational History; Educational Philosophy; *Educational Problems; *Educational Trends; *Elementary Secondary Education; Ethnic Groups; Family Environment; Intelligence Tests; Parent Attitudes; Public Opinion; Racial Integration; Socioeconomic Influences; State Programs; Student Ability; Testing Programs; Test Results; Urban Schools
IDENTIFIERS	Test Score Decline; *United States

ABSTRACT

The U.S. educational system and student achievement are examined using a historical perspective. Academic achievement, school budgets, educational innovations, and educational philosophies are compared across different periods of U.S. history. Problems associated with various changes in the educational process are outlined. Parental attitudes on such issues as student achievement, discipline, and school costs are also presented. Achievement test results representing several different standardized tests, from a cross-section of 23 states, are appended. (MV)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

ED146181

FINAL DRAFT

The U.S. Primary and Secondary Educational Process

by

FRANK ARMBRUSTER

with contributions by

PAUL J. BRACKEN

and the assistance of

JOYCE LIND

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned this document for processing to: TM | SP

In our judgement, this document is also of interest to the clearinghouses noted to the right. Indexing should reflect their special points of view. | EA

HI-2308-RR

JULY 14, 1975

Hudson Institute

Quaker Ridge Road, Croton-on-Hudson, New York 10520
1 Rue du Bac, Paris 75007, France
1-11-46 Akasaka, Minato-ku, Tokyo, Japan

POLICY RESEARCH
IN THE PUBLIC INTEREST

TM006 524

HUDSON INSTITUTE

FINAL DRAFT

THE U.S. PRIMARY AND SECONDARY EDUCATIONAL PROCESS

By
Frank E. Armbruster

with contributions by
Paul J. Bracken

and the assistance of
Joyce Lind

HI-2308-RR July 14, 1975

This study was conducted as part of a project of U.S. social policy studies conducted under a grant from the Office of Economic Opportunity The views and conclusions are those of the individual authors, and should not be quoted without specific attribution.

This is a working document and is not in final form; the statements contained in it may need to be revised or corrected. It is reproduced for private circulation only, not for general distribution or publication, and it should not be cited or quoted without the permission of the author.

HUDSON INSTITUTE, INC.
Quaker Ridge Road
Croton-on-Hudson
New York 10520

We gratefully acknowledge the following sources for permission to use their copyrighted material.

The American Psychological Association for one-time permission to use material from "The Army General Classification Test" by the Staff, Personnel Research Section, Classification and Replacement Branch, Adjutant General's Office, The Psychological Bulletin, v. 42, 1945. Copyright 1945 by the American Psychological Association. Reprinted by permission.

Read D. Tuddenham and the American Psychological Association for one-time permission to use material from "Soldier Intelligence in World Wars I and II" by Read D. Tuddenham, The American Psychologist, v. 3, February 1948. Copyright 1948 by the American Psychological Association. Reprinted by permission.

New Society for one-time permission to reprint excerpts of "Remember, Remember" by Andrew Mayes from the November 1, 1973 issue. The article first appeared in entirety in New Society London, the weekly review of the social sciences. Copyright 1973 by New Society.

Science for permission to use material from "Inequality in Adult Capacity--From Military Data" by Walter V. Bingham, v. 104, August 1946, pp. 147-152. Copyright 1946 by Science.

Fred M. Hechinger and Saturday Review/World for permission to use material from "What Happened to the Best and the Brightest?" by Fred M. Hechinger from the February 9, 1974 issue. Copyright 1974 by Saturday Review/World and Fred M. Hechinger.

Dr. Donald Ross Green, CTB/McGraw-Hill, for permission to reproduce excerpts from a personal communication, and Richard A. Shaffer, The Wall Street Journal, recipient of the communication.

Dr. Karl Shapiro for permission to reproduce excerpts from his article "Is This Really the Brightest Student Generation?," Human Events, July 11, 1970.

Dr. Joseph R. Sligo for permission to use material from his doctoral dissertation "Comparison of Achievement in Selected High School Subjects in 1934 and 1954" for the College of Education, Graduate College of the State University of Iowa, August 1955.

Dr. Stephen A. Roderick for permission to use material from his doctoral dissertation "A Comparative Study of Mathematics Achievement by Sixth Graders and Eighth Graders, 1936 to 1973, 1951-55 to 1973, and 1965 to 1973" for The University of Iowa, July 1973.

Professor Morris Kline to use material from his book Why Johnny Can't Add: The Failure of the New Math, published by St. Martin's Press. Copyright 1973 by Morris Kline.

The College Entrance Examination Board, New York, for permission to use tabular material from "Mean Scores on the College Board Scholastic Aptitude Test" (mimeographed).

The University of Minnesota Press for permission to use material from Who Goes To College?: Comparison of Minnesota College Freshmen 1930-1960 by Ralph F. Berdie et al. Copyright 1962 by The University of Minnesota Press.

Dodd, Mead & Company, Inc., for permission to use material from The Role of the School in American Society by V. T. Thayer and Martin Levit. Copyright 1966 by Dodd, Mead & Company, Inc.

The University of North Carolina Press for permission to use material from The Impact of the War Upon American Education by I. L. Kandel. Copyright 1948 by The University of North Carolina Press.

Alfred A. Knopf, Inc., and Random House for permission to use material from The Transformation of the School by Lawrence A. Cremin. Copyright 1961 by Vintage Books, Division of Random House.

A. N. Hieronymus, The University of Iowa, and Houghton Mifflin, Inc., for permission to use material from Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills by A. N. Hieronymus and E. F. Lindquist. Copyright 1974 by The University of Iowa.

Teachers College Press. "Reproduced by permission of the publisher from Arthur I. Gates, Reading Attainment in Elementary Schools: 1957 and 1937. (New York: Teachers College Press, copyright 1961 by Teachers College, Columbia University)"

Basic Books, Inc., and Diane Ravitch for permission to use material "from The Great School Wars: New York City, 1805-1973: A History of the Public Schools as Battlefield of Social Change, by Diane Ravitch, © 1974 by Diane Ravitch, Basic Books, Inc., Publishers, New York."

ACKNOWLEDGMENTS

I am deeply indebted to Paul J. Bracken not only for the specific sections of this study which he wrote, but for his contributions and assistance on the project as a whole. I am also indebted to Joyce Lind for her suggestions and invaluable assistance throughout all phases of the study from initial research to the editing and production of this written product.

I am grateful to Jane Newitt for her patience, encouragement and assistance throughout this project. Other members of the Hudson Institute staff were also helpful and generous in their advice, particularly Herman Kahn, Rudy L. Ruggles, Jr., Mildred Schneck and Doris Yokelson.

Maud Bonnell, Ruth Ann Crow, Rose-Marie Martin, Carolann Roussel and Audrey Tobin were of great assistance in the graphic work, editing and production of the manuscript.

Except for the signed sections by Paul J. Bracken, none of those named above is responsible for conclusions and interpretations in this study, which are, of course, entirely my own.

TABLE OF CONTENTS

I. INTRODUCTION 1

II. SCHOOL BUDGETS 4

III. STUDENT ACHIEVEMENT RECORD 27

- A. A Longitudinal Study of Academic Achievement Levels by Paul J. Bracken 30
- B. State and City Achievement Test Evidence Over the Recent Past and an Interpretation of Trends in Academic Achievement in General 48

IV. A LONGITUDINAL STUDY OF MEAN IQ 88

- A. IQ Evidence from World War II to the Present by Paul J. Bracken 88
- B. Some Interpretations of IQ Data 96

V. THE EDUCATIONAL PROCESS 102

- A. A Longitudinal Study 102
- B. "Gimmickry," Social Engineering and Demography . . . 163

VI. PARENTS, THE HOME ENVIRONMENT AND EDUCATION 181

- A. A "Then and Now" Study of the Homes and Parents of the Underprivileged 206
- B. Slum Violence--Then and Now 212

VII. THE ATTITUDES OF RECENT, FASHIONABLE WRITERS, ADMINISTRATORS, AND EDUCATORS ON SOME EDUCATIONAL/SOCIAL ASPECTS OF SCHOOLS 233

VIII. SUMMARY AND CONCLUSIONS 253

- A. Expenditures and Product 253
- B. Factors Exterior to the School 265
- C. The Schools and the Educators' Attitudes 275
- D. The Policy Makers and the Need for Information . . . 278
- E. The Depth of the Problems 280
- F. The Effects on Children of the Less Affluent and Others 285
- G. A "How To" Book for School Boards 287
- H. "Quick Fix" Possibilities 288
- I. A Real Two-Track System 291
- J. The Question of Violence in the Schools 292
- K. The Curriculum 293
- L. Facing the Problem 299

APPENDIX by Paul J. Bracken A-1

APPENDIX -- Paul J. Bracken . . . A-1

Arizona . . . A-1
California . . . A-3
Delaware . . . A-8
District of Columbia . . . A-11
Georgia . . . A-14
Hawaii . . . A-16
Idaho . . . A-18
Iowa . . . A-20
Michigan . . . A-23
Mississippi . . . A-25
Nebraska . . . A-27
New Jersey . . . A-28
New Mexico . . . A-31
New York State . . . A-37
North Carolina . . . A-44
Ohio . . . A-46
Rhode Island . . . A-47
South Carolina . . . A-48
South Dakota . . . A-49
Texas . . . A-51
Utah . . . A-53
West Virginia . . . A-55
Philadephia . . . A-57

CHAPTER I

INTRODUCTION

The American educational system has been examined extensively in the recent past from many aspects, often with the intent of improving pupils' academic achievement. In addition, significant changes have been made to rectify situations which were thought to be detrimental to the educational process. Many of these studies concluded that educational shortcomings are attributable to factors beyond the school system's control. Despite these studies, difficulties in this vastly important area of our society seem to persist. For this reason, a fresh look at the system seems warranted, even one as limited in scope as the present study.

It was felt that perhaps the most productive approach in a small study would be to first examine and try to evaluate the premises on which some recent changes have apparently been made and some frequently stated reasons for current teaching and learning difficulties experienced in our schools. To do this one needs a "norm" against which to measure our school systems. There have been studies which compare student achievement in different countries,* but such studies can (justly or unjustly) be faulted on the argument of cultural differences, etc. Similar but perhaps weaker arguments are made about comparing different sections of this country, or even different school districts.

---

*From 1970 to 1973 the International Association for the Evaluation of Educational Achievement, Stockholm, conducted a massive survey of achievement in science, reading comprehension, literature, English and French as foreign languages and civic education. Some 20 countries participated in the main testing program, which surveyed 10-year-old students, 14-year-olds, and those in the final year of secondary education. The survey had been preceded by a smaller survey of achievement in mathematics. L. C. Comber and John P. Keeves, Science Education in Nineteen Countries: An Empirical Study (New York: Wiley, 1973), pp. 9-10.

In this study, therefore, a general longitudinal approach was used, that is, an effort was made to compare the schools with themselves in the recent and not so recent past. Some attempt was also made to look particularly at periods in the past when certain socioeconomic conditions, apparently considered by some to be crucial to student achievement, were as close as possible to what they are today. This was felt to be of importance since so many innovations in our schools (including many extremely expensive and even some admittedly disruptive ones) are apparently based on environmental considerations. Furthermore, it was felt that it would be unwise to dismiss the possibility that some innovations (both educational and social) might at least be partly to blame for some of our current difficulties. The comparison of achievement levels, etc., today with those of the past may, therefore, assume added significance. In any event, it was felt that solely from the viewpoint of recent skyrocketing costs and apparently disappointing student achievement, such an examination might still be useful.

Using students of the past in the same school systems under similar conditions for the basis of comparison seemed a valid way to examine current premises. Similarly, checking issues of parental attitudes, etc., through references to poll data based on a standard scientific sample of parents (and other adults) was considered a valid way to get some idea of the degree of interest indicated by parents in student achievement, discipline, school costs, etc.

It so happens that this type of straightforward comparison seemed to bring to light some questions which, if unresolved, could cast some doubt on current educational policy. Furthermore, the direct comparison method seemed to cast doubt on the conclusiveness of the evidence of some prevailing assumptions. For these reasons the direct comparison method was considered a valuable analytical tool in this study.

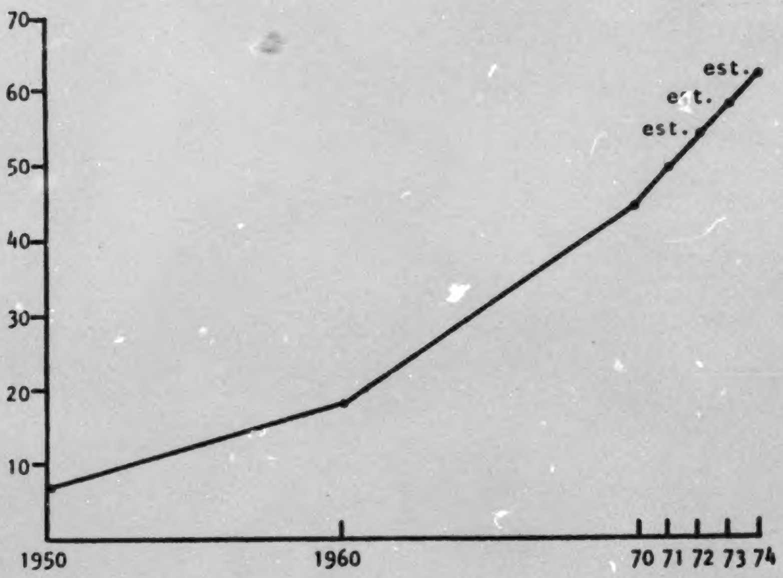
Inherent in the approach described above is the fact that this study did not completely rule out the possibility that the basic approach to education in the pre-innovation period may not have been as inadequate nor as much in need of fundamental changes as was previously supposed. That this system still had some flaws and needed some improvements even as late as the 1950s was accepted, but that it was ineffective as a teaching process because it required the kinds of changes later introduced, could not, it was felt, be readily accepted as conclusively substantiated. This certainly should not be construed to imply a bias against change or innovation or any given speed of change, but rather to signify a questioning of the direction and degree of change. It was felt that, in light of the evidence in the following pages, a position that the burden of proof in the current debate on education should lie less with the innovators is not invalid.

CHAPTER II

SCHOOL BUDGETS

Many things about the innovations in our school systems over the recent past are somewhat unclear. There are some aspects which lend themselves to general statements and others that do not. It is clear, however, perhaps because of the emphasis on some of these changes, that education has become increasingly and alarmingly expensive. The local, state, and federal expenditures on public and private primary and secondary education in the United States rose from $6.7 billion in 1950 to approximately $61.6 billion in 1974.*

ELEMENTARY AND SECONDARY SCHOOL EXPENDITURES, 1950-1974
(BILLIONS OF DOLLARS)



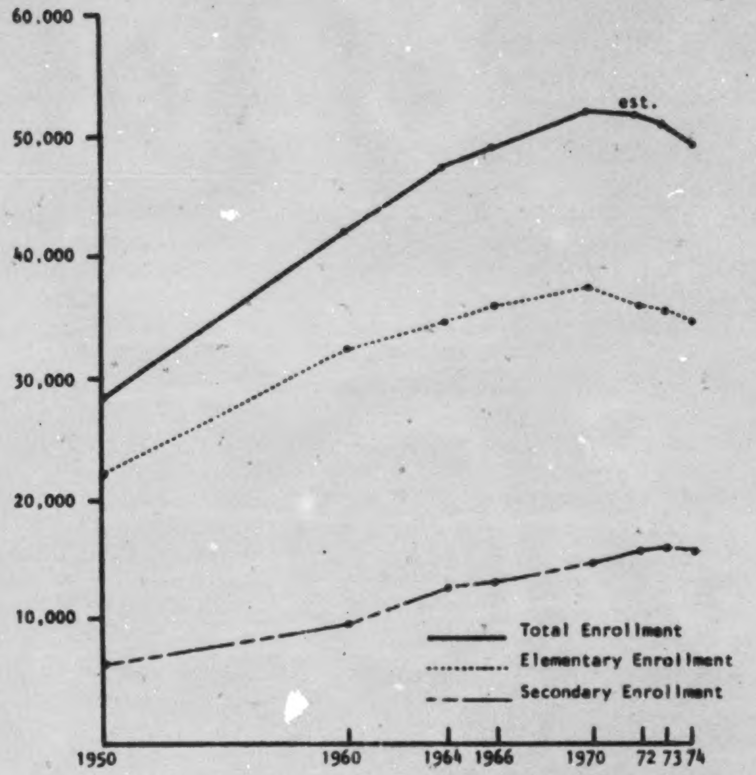
U.S. Bureau of the Census, Statistical Abstract of the United States: 1974 (Wash.: G.P.O., 1973), p. 109, table 172

---

*U.S. Bureau of the Census, Statistical Abstract of the United States: 1973 (Wash.: G.P.O., 1973), p. 107, table 160.

While expenditures increased almost tenfold during this period, student enrollment came nowhere near even doubling; it rose from 28.6 million to 49.7 million.*

PUBLIC AND PRIVATE ELEMENTARY AND SECONDARY
SCHOOL ENROLLMENT, 1950-1974
(THOUSANDS)



U.S. Bureau of the Census, Statistical Abstract of the United States: 1974 (Wash.: G.P.O., 1973), p. 109, table 171; U.S. Department of Health, Education, and Welfare: Digest of Educational Statistics: 1973, Publication No. (OE) 74-11103 (Wash.: G.P.O., 1973), p. 6, table 1; Projections of Educational Statistics to 1983-84, 1974 ed., Publication No. NCES 75-209 (Wash.: G.P.O., 1975), p. 19

---

*Statistical Abstract of the United States: 1974, p. 109, table 171; U.S. Department of Health, Education, and Welfare: Digest of Educational Statistics: 1973, Publication No. (OE) 74-11103 (Wash.: G.P.O., 1973), p. 6, table 1; Projections of Educational Statistics to 1983-84, 1974 ed., Publication No. NCES 75-209 (Wash.: G.P.O., 1975), p. 19.

Furthermore, between 1960 and 1974, when elementary and secondary student enrollment increased from 42 million to 49.7 million, a gain of only 18.3 percent, the expenditures rose from $18 billion to $61.6 billion, a gain of 245 percent.*

The largest part of this expenditure of course is, and has been, for public schools: $56 billion in 1974 to educate 45 million children.** The latest estimate for expenditures per pupil per year was $1,281 for all public school pupils.*** Private schools are estimated to have spent $5.6 billion for 4.7 million children, or $1,191 per pupil.**** By far the largest group of private school students attend Catholic parochial schools at an estimated cost per elementary school pupil for the 1972-73 school year of about $310. Catholic high schools (which contain less than one fourth of parochial school pupils) had a per pupil cost of about $700.***** The average cost per pupil for all schools in 1972-1973 was $1,182, in 1950-1951 it was about $227. In constant 1972-1973 dollars, because of inflation, this 1950-1951 figure equates to $490. The 1972-1973 costs per pupil were 141 percent higher, in absolute terms, than the cost per pupil in 1950-1951. Costs per pupil, in constant dollars, rose 64 percent between the 1960-1961 and 1972-1973 school years alone.+

---

*Statistical Abstract of the United States: 1974, p. 109, table 172.

**Ibid.; Projections of Educational Statistics to 1983-84, p. 19.

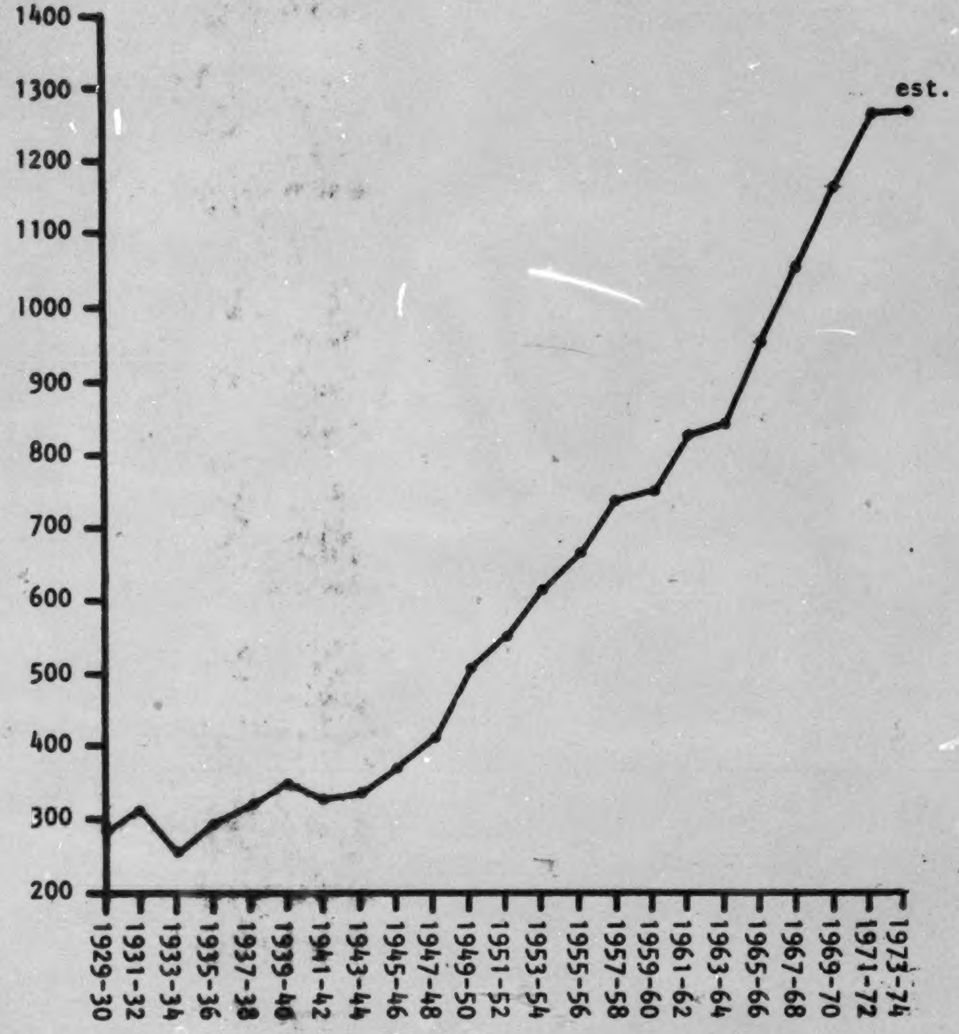
***U.S. Department of Health, Education, and Welfare, Digest of Educational Statistics: 1974, Publication No. NCES 75-210 (Wash.: G.P.O., 1975), p. 67, table 78.

****Statistical Abstract of the United States: 1974, p. 109, table 172; Projections of Educational Statistics to 1983-84, p. 19.

*****Tax Credits for Nonpublic Education. Hearings Before the Committee on Ways and Means, House of Representatives, Ninety-Second Congress, Part I (August 14-16, 1972), pp. 68, 94 and 97.

+Digest of Educational Statistics: 1973, p. 65, table 78.

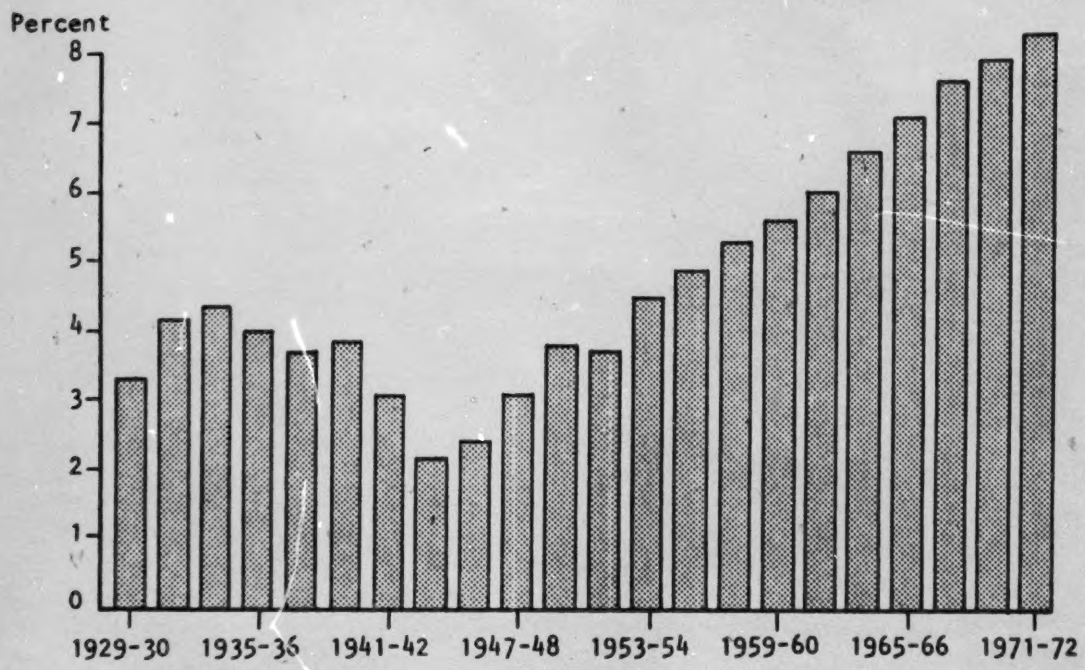
TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE
IN PUBLIC SCHOOLS, 1929-30 TO 1973-74*
(CONSTANT '73-'74 DOLLARS)



U.S. Department of Health, Education, and Welfare, *Digest of Educational Statistics: 1974*, Publication No. NCES 75-210 (Wash.: G.P.O., 1975), p. 67, table 78

The increase in educational expenditures in the country (including higher education, i.e., college) has truly been spectacular. In percent of GNP it rose from 3.4 in 1950 to over 8.0 percent in the 1971-72 school year.

TOTAL EXPENDITURES FOR EDUCATION AS A PERCENTAGE OF THE GNP:
UNITED STATES, 1929-30 TO 1971-72



The large percentage of the GNP spent on education in 1930-41 was the result of the plummeting GNP. Even though the World War I baby boom was swelling school population to unprecedented proportions, expenditures on education, like all spending, actually decreased compared to the 1920s.

U.S. Department of Health, Education, and Welfare, Digest of Educational Statistics: 1973, Publication No. (OE)74-11103 (Wash.: G.P.O., 1973), p. 24

The estimated cost for 1974 was 7.4 percent of GNP,* but that estimate was probably based on an estimated continued increase in GNP. Actually the GNP has fallen during the 1974 recession, while school costs seem not to have dropped, at least not at the same rate. In 1971 costs of all types of education (including higher education) passed those of national defense. The Department of Defense budget for 1971 was $77.7 billion while the costs of education were $83.3 billion, and the estimate for 1972-1973 education costs (these estimates are usually low) totaled $89.5 billion, while those for the defense budget for 1973 were $78.3 billion.** The estimated 1974 expenditures for all types of education were $96.3 billion, for primary and secondary schools $61.6 billion, and for national defense $80.6 billion.***

The trend toward increased expenditures was the strongest in the densely populated, industrialized northern areas. In New York State between 1951 and 1973-1974, expenditures on primary and secondary public education have risen from about $800 million**** to a figure that must exceed $6 billion. (During 1973-1974, expenditures were $5.92 billion.*****) This increase was at a considerably higher rate than for the nation as a whole. The enrollment in the public schools of New York State between 1951 and 1972 rose from about 2 million[*] to about 3.52 million.[**] In 1972-1973 this figure was 3.49 million.[***] Yearly expenditures per pupil in Average Daily Attendance (ADA) rose from about $400 plus in 1951 to $1,808 in 1972-1973.[****]

---

*Statistical Abstract of the United States: 1974, p. 109, table 172.

**Statistical Abstract of the United States: 1973, p. 257, table 404; Digest of Educational Statistics: 1973, p. 25, table 27.

***Statistical Abstract of the United States: 1974, p. 109, table 172, p. 306, table 488.

****This figure was derived by upping the per pupil expenditure for 1950 ($331.33) as it appears in The Fleischman Report on the Quality, Cost, and Financing of Elementary and Secondary Education in New York State (3 vols. [New York: The Viking Press, 1973]), v. 1, p. 17, to $400 and multiplying that number by about 2 million pupils (ibid., p. 5) to equate to the figure of $5.92 billion in the next line. The original $331.33 figure did not contain capital costs, etc.; the 1973-1974 figure contains such costs.

*****See preceding footnote.

In the 1972-73 school year, California spent $1,129 per pupil in average daily attendance; Connecticut, $1,365; Illinois, $1,394; Massachusetts, $1,234; Michigan, $1,461; New Jersey, $1,476; Ohio, $1,038; Pennsylvania, $1,427, while the national average was $1,182. New York had the highest cost per pupil of any state except for Alaska ($1,961).[*****] (For reasons which will become apparent later, it might be of interest to note that for the 1972-1973 school year, West Virginia spent $826 per student, Nebraska $1,074 per student, Iowa $1,238 and South Dakota $900.[+]).

In downstate suburban areas of New York State, 1974-1975 budgets reflect spectacular costs. Average cost per pupil per year for primary and secondary public schools (including kindergarten) is about $2,600. The secondary (high school) portion of these budgets, therefore, must reflect a cost of well over $3,000 per pupil.* Nor is this pattern confined to New York State, although the absolute figures may be somewhat higher. New York's per pupil expenditure ranks second in the nation.

---

[*] The Fleischmann Report, v. 1, p. 5.

[**] Digest of Educational Statistics: 1973, p. 30.

[***] Ibid.

[****] Ibid., p. 65, table 77.

[*****] Ibid.

[+] Ibid.

We are all aware of the large (some say excessive) number of new schools which have been built in recent years (many very lavish**) to meet both the increased student body and the drive for smaller classes, and the proliferation of electronic and other gadgets in the schools.*** Such activities help expand the great costs of capital outlay ($4.5 billion of a $45.5 billion primary and secondary school budget for 1970-71), plant operation ($3.1 billion) interest on debts ($1.3 billion), etc. But these expenses, though large, often excessive and even unnecessary,**** are small compared to the huge and greatly increasing amounts of money spent on instructional and administrative staff salaries and benefits. With the decrease of children of school age, school construction and even maintenance (schools are closing today) should not increase significantly in the near future. Increases in future costs, even more than in the past, should reflect increases in costs of salaries. The salaries of instructional and administrative staff, therefore, seem worth examining.

---

*See proposed 1974-75 school budgets for school districts in Rockland and Westchester Counties, e.g., Nyack School District, a medium-income area in Rockland County.

**The author once delivered a lecture from a stage in a huge, extremely expensive auditorium (theater) in a high school in New York State which was superior to most on Broadway, then retired to a principal's office with furniture, wall-to-wall carpet and general decor more lavish than many a Fifth Avenue office. There is no evidence that this school is completely atypical for new high schools in the industrialized states.

***For example, one school in Washington, D.C. with 247 children, grades three through six, in twelve classrooms, had "'...10 television sets, 10 filmstrip projectors, 3 overhead projectors, 4 calculators, 10 record players, 1 copy machine and 2 primer typewriters.'" Mark R. Arnold, "Public Schools," in Sar A. Levitan, ed., The Federal Social Dollar in Its Own Back Yard (Washington, D.C.: Bureau of National Affairs, 1973), p. 41.

****In 1971 HEW investigators "charged that 'considerable amounts of equipment' had been purchased through Title I with 'no evidence' that it contributed to meeting the needs of Title I children." Ibid.

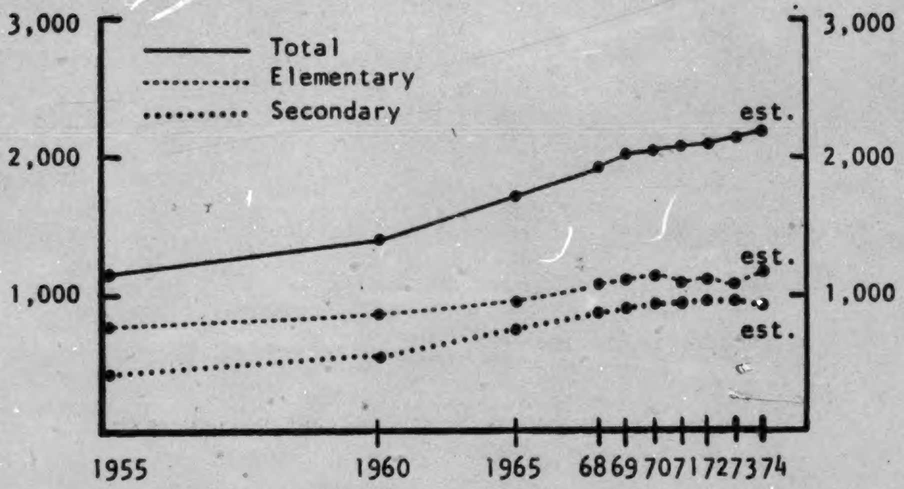
In 1970-71 out of that total $45.5 billion expenditure in the United States for public primary and secondary education, over $26.2 billion went for "instruction" (teachers' salaries), almost $1.4 billion for "local administration" (salaries of principals, school superintendents and assistants, etc.), almost half a billion dollars for state and intermediate administration, almost $3.7 billion for "fixed charge" (which includes a lot for fringe benefits for the instructional and administrative staffs).*

These numbers reflect two factors, the number of teachers and the average salary and fringe benefits per teacher. The number of teachers employed is reflected in the following graph:

---

*U.S. Department of Health, Education, and Welfare, Expenditures and Revenues for Public Elementary and Secondary Education: 1970-71, Publication No. (OE) 73-11407 (Wash.: G.P.O., 1973), pp. 8 and 9.

TEACHERS IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS, 1955-1974
(THOUSANDS)



U.S. Bureau of the Census, Statistical Abstract of the United States: 1974 (Wash.: G.P.O., 1973), p. 126, table 206, p. 127, table 207

New York's per pupil expenditure in 1969-70 on instruction (teachers' salaries $733) and administration ($54) was far higher than that of other states. Her nearest competitors were Connecticut ($634 and $35), California ($590 and $53) and New Jersey ($579 and $31). In fixed charges per enrolled pupil (1969-70) New York, $178, surpassed the other industrial states by an even wider margin: New Jersey $110, Pennsylvania $82, Connecticut $88, California $68, Illinois $73. (As mentioned earlier, these charges reflect fringe benefits to teachers.* In New York a pension plan accounts for the lion's share; it was already $94 per pupil in 1965-66.**)

Overall the increase in costs is often likely to result from factors which usually have no proven effect on pupils' academic achievement, e.g., the number of pupils per teacher in a given school.*** Nationally as a result of the greater percentage increase in teachers than in pupils over the years, and recently due to a drop in school enrollment which was not accompanied by an equivalent percentage decrease in teachers, the student-teacher ratio has continued to fall.

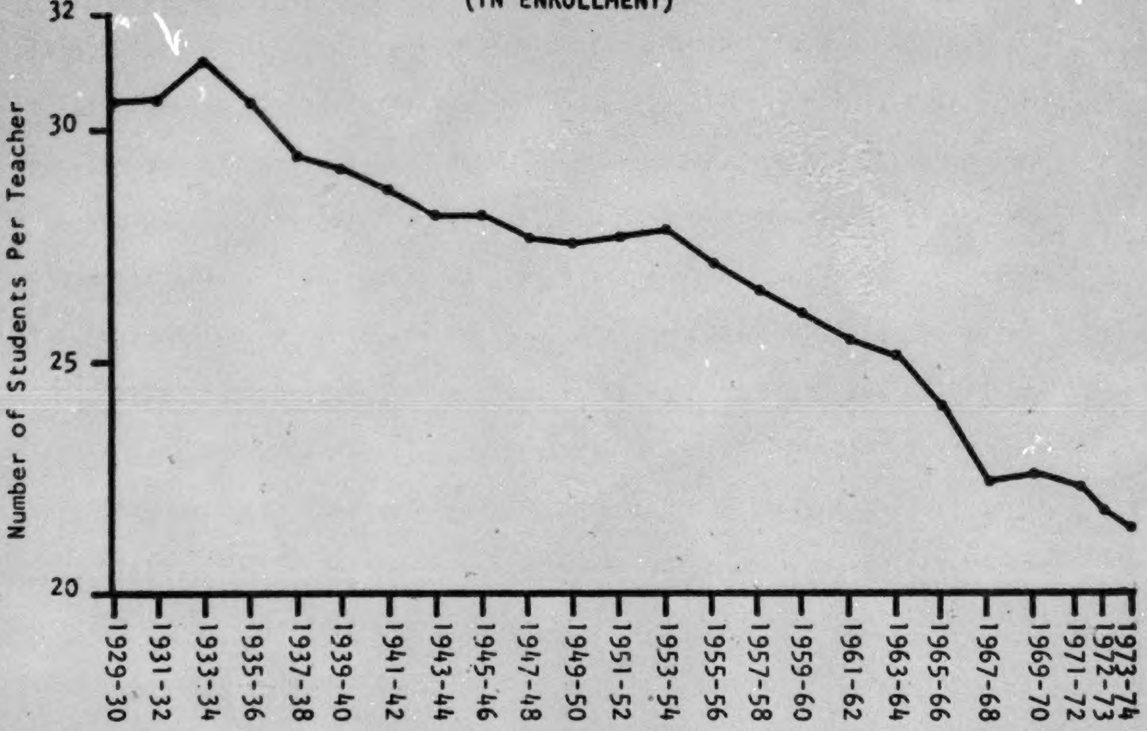
---

*Digest of Educational Statistics: 1973, pp. 32 and 62.

**The Fleischmann Report, v. 1, pp. 18, 19 and 22.

***See pp. 16, 263-264. The student/teacher ratio is not the number of pupils assigned to a classroom teacher, but the number of pupils in a building divided by the number of teachers in that building, including all non-classroom teachers, a very different thing.

PUBLIC ELEMENTARY AND SECONDARY SCHOOL STUDENT-TEACHER RATIO
1929-1930 TO 1973-1974
(IN ENROLLMENT)



U.S. Department of Health, Education, and Welfare: Digest of Educational Statistics: 1973, Publication No. (OE) 74-11103 (Wash.: G.P.O., 1973), pp. 33-35; Statistics of State School Systems: 1969-70, Publication No. (OE) 74-11421 (Wash.: G.P.O., 1973), pp. 5 and 7; Statistics of Public Elementary and Secondary Day Schools: Fall 1973, Publication No. (OE) 74-155 (Wash.: G.P.O., 1973), pp. 12, 14 and 16

In New York, the number of professional staff (including principals, assistant principals, etc.) per 1,000 students has risen from 44.5 in 1951 to 61.2 in 1971, or one such staff member for every 16.3 pupils. The absolute number of such staff members in New York State in 1951 was 86,000. In 1971 it was 213,500.* New York State has a higher ratio of instructional staff to pupils than any of the states listed earlier and

---

*The Fleischmann Report, v. 1, pp. 18, 19 and 22.

(with the exception of Alaska) pays instructional staff more than any other state in the union.

In New York City in the fall of 1973, there was one teacher for every 18.4 pupils enrolled, and one teacher for every 15.0 pupils in average daily attendance (note the high absenteeism), while the national average is one teacher for every 19.8 pupils in average daily attendance,* and 21.4 pupils in enrollment. New York City has the largest number of teachers per 100 pupils in any large city in the country. If we were to add the thousands of principals and assistant principals, consultants and supervisors of instruction, librarians, guidance personnel, psychological personnel and other non-supervisory, instructional personnel (to say nothing of security personnel, etc.), we would no doubt begin to approach one instructional employee (or at least one adult employee) for every 10 or 12 public school pupils in average daily attendance in New York City. For the 1973-74 school year, the estimated average salary for instructional staff in New York State was $13,300, while the national estimated average was about $11,185.** New York State's (ADA) pupil/teacher ratio was 17.2 to 1.***

Educators' salaries (that of teachers, principals, supervisors, etc.) are about 20 percent above the overall national average for all workers, "$10,608 vs. $8,874 in the 1972-1973 school year."**** The average salaried "professional technical and kindred" man (including salaried physicians and surgeons) earned $13,187 in 1972, and the salaried professional woman earned $8,758. Male primary and secondary school teachers earned $11,310 in 1972 and female teachers (two thirds of the force) earned $8,706.* Other professional people, however, work different amounts of time for the salaries mentioned above. Teachers have extended Christmas and spring vacations as well as all holidays and the entire summer free. This is so because of the way our schools function and in no way reflects any connivance by school instructional staff. (Indeed many teachers supplement their salaries to a significant degree by working on other jobs during the summer to the extent that their yearly days worked approach those of the average worker.) On the other hand (and important from the viewpoint of the taxpayer), the adequacy of the remuneration the taxpayer is offering teachers for time spent rendering teaching service is often challenged by educators and others.

---

*U.S. Department of Health, Education, and Welfare, Statistics of Public Elementary and Secondary Day Schools: Fall 1973, Publication No. (OE) 73-11402 (Wash.: G.P.O., 1973), pp. 23 and 24.

**Ibid., pp. 7 and 24.

***Ibid., p. 23.

****Digest of Educational Statistics: 1973, p. 48, table 56.

It may be of interest to note how teachers' salaries compare with those of all college graduates on a day-for-day, money-earned basis. The average college-educated person must be at his place of business approximately 240 days a year, 8 hours a day. Instructional personnel in our schools (with the exception of district superintendents and assistant superintendents) are supposed to report for duty about 180 days a year, and work approximately 6 hours a day. Many teachers actually teach an average of only 4 hours a day, while few teach more than 6, including extra teaching assignments. ("Discretionary" absences, time taken off for which no justification is required, reduce teaching days by another 2.5 percent nationally, on the average.*) Even if we assume that all teachers use any free time during the day and spend up to an additional 2 hours daily at home doing school-related work (averaging an 8-hour day 5 days a week), the time spent by nonteacher college graduates on the job is still about 133 percent of on-the-job time for teachers. So the $10,608 national average salary for teachers, principals and superintendents for the year beginning in September 1972 was earned, in the overwhelming majority of cases, at a daily rate equal to $14,100 for a full year's work, which apparently compares favorably with the average yearly income for all college graduates, $13,200 in 1971.**

---

*Statistical Abstract of the United States: 1974, p. 361, table 581.

The 1971 income breakdown for all full time workers with college degrees in the United States was: males, $15,791; females, $9,040.***

---

*The New York Times, January 16, 1974, p. 20. In New York City the 1971-72 average was 6 percent of teachers' time lost due to discretionary absences.

**Derived from U.S. Bureau of the Census, Current Population Reports, P-60, No. 85, December 1972, "Money Income in 1971 of Families and Persons in the United States" (Wash.: G.P.O., 1972), pp. 112-119 and 155-157.

***Ibid.

ALL COLLEGE GRADUATES, 1971

	4 Years College	5 Years College	Combined Average of 4/5 Years College
18-24-year-olds			
Males:	$ 7,735	*	$ 7,735
Females:	6,935	*	6,935
25-year-olds and older			
Males:	15,565	$17,983 (46.0%)	16,661
Females:	8,648	10,785 (34.0%)	9,471

*Full-time employees in this age cohort with 5 or more years of college represented a base of less than 75,000 for the country.

U.S. Bureau of the Census, Current Population Reports, P-60, No. 85, December 1972, "Money Income in 1971 of Families and Persons in the United States" (Wash.: G.P.O., 1972), pp. 112-119 and 155-157

The average age of that segment of college graduates found among educators is likely to be lower than that of members of other professions, for though the number of college graduates rose by about 5 percent between 1960 and 1971,* the number of grade and high school teachers rose by 90 percent.** In 1964, 16.9 percent of elementary school teachers had only one to three years of experience. In 1971, that figure had risen to 25.5 percent. Those with twenty or more years experience dropped in elementary schools from 21.1 percent to 14.8 percent.*** The fact that teachers are likely to be younger on the average than other college graduates is significant, for, as we have seen, among all college graduates in the country the older people drive the average up. Even the over-24 group is significantly higher in salary than those below 24.

---

*Statistical Abstract of the United States: 1972, p. 112.

**Digest of Educational Statistics: 1973, p. 11, table 10.

***Statistical Abstract of the United States: 1972, p. 122.

This brings us to a subject which, in my judgment, is raised too often these days--the years of higher education and even the average intelligence of primary and secondary school teachers. Regardless of teachers' average academic achievement (and even IQ), they number in their group many very intelligent, capable and dedicated people (though, as we shall see later, there seems to be evidence that the number of such teachers is dwindling). In any event, one is well advised not to count academic achievement and IQ alone as measurements of teaching ability. Teachers require personalities which suit them for dealing with often trying youngsters, as well as the ability to impart their knowledge to someone else--an ability obviously absent in many very intelligent people. On the other hand, since this topic of teachers' higher education (particularly years of graduate school) may be considered important to many, and may even be considered as a basis for comparison of salaries of teachers and other college graduates, we perhaps should touch on it.

Teachers have less graduate school work than has the average American college graduate. In 1971 among all male working college graduates, 43.6 percent had five or more years of college; among all working female college graduates, the number was 30.5 percent.* For the same year, among working teachers the figure for males was 40.8 percent and for females 19.9 percent.[*] For college-educated workers this is significant as far as income is concerned. For example, among the 25- to 34-year-old group of male college graduates working full time, the average income for those with undergraduate degrees was $12,122, while for those with five or more years of college, it was $13,825. For women, the comparable figures were $7,959 and $9,229.[**]

---

*Current Population Reports, P-60, no. 85, pp. 112, 116, 155 and 156.

Furthermore, there are some who would argue that comparing university school of education graduates, to say nothing of state teachers college graduates, with graduates in other fields from other colleges and universities would be somewhat misleading. Institutions of higher learning that educate potential teachers vary, as do any other schools; some are better than others and it is wrong to condemn them all. It seems true, however, that the school of education in any given university, particularly among those of higher academic standing, is not likely to rank high scholastically among schools within that university. It is also true that one gets the impression that the average scholastic aptitude of students in these schools of education is normally low among the disciplines at any given college or university.[***]

---

[*] *Statistical Abstract of the United States: 1972*, p. 122.

[**] *Current Population Reports*, P-60, No. 85, p. 112.

[***] There apparently is more to this suspicion of average relative scholastic weakness among education majors than the almost universal impression of those who have attended college. After some comparison of statistics, James B. Conant concluded emphatically (in italics) in 1963, "...*It is clear that in many institutions many of those graduated as teachers must have scholastic aptitudes well below that of the top 30 per cent of the graduating high school class on a national basis*." He adds, "This corresponds to my observations on the intellectual level of the bottom portion of the class preparing to be teachers in certain institutions." James B. Conant, *The Education of American Teachers* (New York: McGraw-Hill, 1963), p. 237. One must remember that in this time

It is to be noted that even omitting the low paid college graduates under 25 (who comprised an increasing number in this group in recent years and a large segment of teachers, and whose income is counted into the teacher's average salary for 1971), only one category of college graduates under 34 (males with five or more years of college)* approaches the average daily salary for teachers, and certainly such income for all college graduate employees between 18 and 34 is considerably below the average daily income for teachers. Furthermore, if we were to take a sample of all college graduates based upon a mix of men and women similar to that of instructional staff in primary and secondary schools (where women outnumber men by two to one rather than making up only 29.9 percent of the group as is the case for all college graduates), the educator's average daily rate of pay would be considerably higher than that of a similar mix for all college graduates of all ages, including those with five or more years of college.

Also, there is a degree of security in a teaching job once a teacher acquires tenure (an almost automatic procedure after a few years of teaching in many school districts**), which is hard to measure in dollar value, but is unmatched in the overwhelming number of professional fields.

---

period 30 percent of those graduating from high school did not graduate from college. E.g., 1.9 million people graduated from high school in 1960 and only .5 million graduated from college in 1965. Statistical Abstract of the United States: 1972, p. XV. To have large numbers of college graduates in a discipline coming from "well below" the upper 30 percent level of high school graduates must place the average scholastic aptitude of the group as a whole low on the scale of such attributes among college graduates.

*Current Population Reports, P-60, No. 85, p. 112.

**"Once a teacher or administrator is hired he can be reasonably assured of tenure regardless of his performance." The National Observer, March 9, 1974, p. 22.

Then there are the fringe benefits which are measurable in dollars, to the taxpayer at least, for they can amount to up to an additional 30 percent or more of the teacher's salary. The argument, therefore, that in general most teachers would be likely to have trouble getting the kind of degrees held by most other college graduates with which we are comparing them may, for some purposes, no longer be completely invalid. Such information may be useful when the charge is made that, in general, private industry still stands ready to steal our teachers unless we raise their salaries even higher. In addition, there may be some merit in the argument that the majority of college graduates in other positions have led more precarious lives in business and industry. The overwhelming majority have no tenure, and money available for salary is based on company funds which have definite, obvious and (particularly during dips in the economy) often restrictive limits. Teachers' salaries are based on tax source and backed by the power of the state. (This situation is [illegible] obvious in states like New York, with its nonvoted austerity budgets, where, in effect, taxpayers have no opportunity to vote down the constantly escalating teachers' and administrators' salary portions of school budgets.)

In any event, although it may once have been so, it apparently is no longer true that there seem to be grounds for the position that, considering their education, talent and efforts, teachers are vastly underpaid. Furthermore, among large groups of professional employees, teachers hold a unique position. They are not only represented by the powerful National Education Association but are members of two unions, which combined (and there is talk of amalgamation) make up the largest group of organized workers in the country; they even outnumber the monster teamsters union conglomerate. They wield impressive power in local communities, statewide and nationally. It was predicted their campaign contributions in 1974 would exceed $2 million, making them "one of the best financed special interest groups in the nation." Most of the money will go to candidates for state and local offices, but $600,000 to $750,000 will probably go to candidates for Congress. By comparison, "the American Medical Association and its state affiliates which have long been considered one of the richest of the special interest groups and one of the most powerful lobbies in Washington, gave $475,000 to candidates for Congress in 1972." Senator Pell of Rhode Island owes his position to the teachers, and candidates for local, state and Federal offices across the country vie for their money and support.* (Teachers' organizations have also been known to work through other channels to affect directly the educational process, e.g., the New Jersey Education Association, for various reasons, brought suit in court and, at least temporarily, blocked the release of statewide student achievement test scores for 1973.**)

Teachers' union locals, represented by tough professional negotiators, often deal with inexperienced, sometimes intimidated, local school boards, who cannot get over the idea that they must depend on the "professional educators" to outline "quality education" for the children. In effect, therefore, educators not only exercise absolute control over the union side of the bargaining table, but wearing their other hat as the only "professionals" qualified to hold forth on

---

*The New York Times, September 22, 1974, p. 1.

**The New York Times, August 4, 1974, Section E, p. 9.

"quality education," exert significant influence on the management side. This is truly an odd (perhaps unique) situation in union-management negotiations. Nor are school superintendents (themselves usually educators, ex-teachers) necessarily much help these days, particularly as far as increases of teacher productivity as measured by student achievement are concerned. In such circumstances, it is little wonder that teachers' union representatives have been so successful in their legitimate mission of getting the best conditions they can for their members.* On the other hand, one can but sympathize with those who ask, "Who is looking out for the welfare of the children and the taxpayers?" In many cases, one gets the impression that this consideration may not be of the importance to either party in the negotiations that many think it should be.**

There is ample evidence that while the average citizen continued to have high regard for education as a means of upward social and economic mobility, and respect for teachers and the educated person per se, he was becoming pinched for money and perhaps no longer saw exactly eye to eye with some educators. By the 1970s opinion polls showed he was unwilling to pay more taxes for public schools (1970, 56 percent against, 37 percent for; 1972, 56 percent against, 36 percent for); he wanted national achievement tests to be given and the children of his district compared with others (1970, 75 percent for, 16 percent against); he wanted teachers and administrators held responsible for students' progress (1970, 67 percent for, 21 percent against); and their salaries to based upon the quality of work rather than a standard scale basis (1970, 58 percent for, 36 percent against); he was in favor of more discipline in the schools (1970, 53 percent for, 35 percent against; 1972, 61 percent for, 28 percent against).* His attitude may reflect a feeling for what has recently been happening to pupils. Children's achievement scores, as we shall see, apparently left much to be desired.

---

*The author once worked with a board of education which was in the process of negotiating with a teachers' union without having developed a negotiating position. They entered the bargaining with no demands on the teachers, but merely an inquiry of what the teachers wanted. They then tried to whittle down the demands, which probably came in with much whittling cushion.

**The same school board mentioned in the preceding footnote apparently had never examined the achievement scores of the children and compared them with past performances of the school system, or examined IQ scores over the years. There are indications that this elected board was not unique in this respect.

---

*See "Parents, the Home Environment and Education."

CHAPTER III

STUDENT ACHIEVEMENT RECORD

A standard question which arises when discussing education is whether students are academically as well equipped today when they leave high school as they were ten or more years ago. The answer is not readily discernible from newspaper articles which rate individual districts, schools or classes as being above or below the "national average" in achievement, for though this does indicate a standing of districts or schools compared to others nearby at the time of reporting, it does not indicate how any district is doing over time or whether the national average has risen or fallen over time.

Actually these national averages today are not current national averages at all; they are averages of the last time an achievement test was normed. Norming a test consists of selecting a large (perhaps 200,000), fairly typical sample of American students, administering the test to them, then getting the distribution of scores from this sample. This procedure is very expensive (about $1,000,000) and is not carried out too frequently by testing organizations. The result is that tests administered in 1974 usually were normed in the mid-1960s. What one sees in the newspapers (at least up to 1974) therefore is the comparison of a district or state with the national average of the mid-1960s.

This in itself has advantages, however, for it lends itself to longitudinal studies of our school system. As we shall see, it is possible to gather enough data from such tests to produce some rather good evidence as to whether the overall national average in achievement has gone up or down since the tests were last normed. Of course, assuming a state continues to administer the same standardized tests several consecutive years, the trend in achievement in any given state or school district is quite apparent from the record of the test results. There are indications that the standardized tests administered to our children are going to be largely renormed in the near future, so that the chain of comparative results will be broken for a few years until a new trend line can be established. The comparisons, however (at least in the past), of the new raw score distribution for the test, compared to those established years earlier, give a trend of the norms themselves. If, for example, a test was normed in 1964 and the fiftieth percentile (i.e., 49 percent of students scored below that point and 49 above it) fell on a raw score of 50 answers correct out of 100, and the test was renormed in 1974 and the fiftieth percentile fell on a raw score of 45 answers correct out of 100, the national average can be assumed to have declined about five points on the raw score.

Some states give their own tests, administered only to their own students, which makes comparison to a national average more difficult, but the ability to compare the state to itself over time, of course, still remains.

The real difficulty arises when the content of the tests is changed, which does occur. Despite such breaks in the chain, however, and despite the paucity of data points as one goes further back in time, a feeling for the trend, over time, of scholastic aptitude, or at least expectations of scholastic aptitude, for a given grade or grades can still be derived. These hints are valuable in many ways, not the least of which is to compare what they imply with accepted notions about education. Of course, as standardized testing became more prevalent over the past two decades, data points emerged in such numbers and with such consistency that trends, particularly in statewide achievement, became much more discernible.

There are those who attack achievement tests on many grounds, including the charges that they are culturally biased and that they do not test for the correct things. (They normally test for basic verbal and mathematical skills--reading, grammar, word definition, mathematical computation and methodology, etc., and often for social studies and science.) We will not attempt to debate the issue of test validity here for we feel, first, that for our primary purposes (i.e., to seek trends in average achievement test results over the years), the objections are less valid; and second, despite our awareness of the imperfection of achievement tests and testing, that not only are these tests the only (in some sense) objective evaluators of our schools, but arguments which contest the claim to any validity in trends of average test results over time are far from conclusive, particularly in light of other evidence. We therefore examined the data on achievement test results, beginning with "then and now" studies which have gone back into the history of our schools to recover tests given "then" and administered the tests "now" to students in the same grade(s).

A. A Longitudinal Study of Academic Achievement Levels

Paul J. Bracken

One of the earliest comparisons between pupils of different times was the readministration of a test originally given to the top eighth grade students in selected Boston schools of 1845. The group tested in 1845 consisted of pupils who were attempting to win an "honors medal." The comparison group was again Boston eighth graders and those of several other cities in 1919. The test contained sections on history, geography, arithmetic, grammar, definitions, natural philosophy, and astronomy. For obvious reasons this test proved hard to administer to eighth graders in 1919. In fact, the 1919 test contained only 18 percent of the questions asked on the 1845 version. A full 82 percent of the original questions were screened from the test primarily because they were too difficult for the 1919 children.* The test results indicated that the 1919 group had a median score 21 percent higher than the Boston children of 1845.**

---

*In summarizing this study, however, Archibald W. Anderson, "The Charges Against American Education: What is the Evidence?," Progressive Education 31 (1952): 91-105, apparently did not realize this and stated:

> In spite of the fact that the unselected group of 1919 pupils were being compared with a highly selected group of "superior" 1845 pupils, and in spite of the fact that the 1919 pupils were taking some examinations on subjects no longer taught as such, they did much better on the examinations as a whole than the pupils of 1845. The median score for the 1919 group was 45.5 as compared with a median score of 37.5 for the 1845 group. In general, the 1919 pupils tended "to make lower scores on pure memory and abstract-skill questions, and higher scores on thought and meaningful questions." As quoted in C. Winfield Scott and Clyde M. Hill, eds., Public Education Under Criticism (Englewood Cliffs, N. J.: Prentice-Hall, 1954), p. 277.

**Otis W. Caldwell and Stuart A. Courtis, Then and Now in Education, 1845-1923: A Message of Encouragement from the Past to the Present (Yonkers, N. Y.: World Book, 1924).

Even though this exam was designed for honor students, the belief among many that today's youngsters (or even current honor students) in a given grade are clearly likely to know much more than children (or honor students) of 100 years ago in the same grade we found to be a little less convincing after looking at this test.

The next comparisons of changes in educational achievement examined stem from a series of studies of reading ability.

PRE-WAR READING ACHIEVEMENT COMPARATIVE STUDIES

Period	Indicator	Achievement Changes
1924/1934	Woods study of grade 6	+ 6 months*
1927/1939	Davis and Morgan study of grade 6	+ 2 months**
1916/1938	Boss study of grades 2-8	- gains in grades 4-8***

---

*Elizabeth L. Woods, unpublished data from the Division of Psychology and Research, Los Angeles Public Schools, Los Angeles, California, as cited in J. Raymond Gerberich, "The First of the Three R's," Phi Delta Kappan 33 (1952): 346.

**Percy R. Davis and M. Evan Morgan, A Balanced Educational Program for Santa Monica (Santa Monica, Calif.: Board of Education, 1940), as cited in Gerberich, p. 346.

***Mabel E. Boss, "Reading, Then and Now," School and Society 51 (1940): 62-63.

From the above it seems that school achievement was rising in the 1920s and 1930s--progress was made in this period. An interesting feature, however, is that in the Boss study, which compared about 9,000 1916 St. Louis children with approximately 1,100 1938 St. Louis pupils, the 1916 pupils outscored those of 1938. The results, of course, are not necessarily true for the nation as a whole. However, it would be risky to say they are not representative, for it is fascinating to note that experience has shown (at least in recent years) that achievement generally seems likely to fluctuate nationally over periods of several to many years in the same way that it does locally. The mean scores for the 1916-1938 St. Louis students are presented below:

AVERAGE SILENT READING QUALITY SCORES 1916 AND 1938

Grade	2	3	4	5	6	7	8
1916	37	45	34	38	44	30	34
1938	38	45	29	28	36	24	31

Mabel E. Boss, "Reading, Then and Now," School and Society 51 (1940): 62-63

Since it is difficult to rely on old data when we do not know the detailed experimental design, we are fortunate that the trend between 1916 and 1938 for all grades above grade 3 is obvious. (An important factor here which shows up in almost every comparative study of student achievement we have examined is that the differences in achievement occur above the third grade--we shall comment at length on this phenomenon later.) It seems quite likely that reading achievement in 1916 was superior to that in the late 1930s.

If we accept that achievement was higher in 1916 than in 1938 and that it was lower in the 1920s than in the 1930s (though it appears it was increasing in the second half of the 1920s), then there appears to have been a trough between 1916 and the mid-1920s. Unfortunately, we have no more data on this and it is thus impossible to pinpoint this fascinating social indicator. It is just as likely that 1916 was on a declining trend as it is that it was a peak year, but it is not so likely that it was increasing, unless the drop was precipitous just prior to 1924.

A quarter century gain in reading achievement was found in a study of Lincoln, Nebraska, that compared 1931 pupils with those of 1947.* These gains were recorded for students in grades 4 through 7 who were from six to eight months younger at identical grade positions in 1947 than in 1921.

There seems to be a broad consensus of opinion in educational discussion that large gains in achievement were made in the 1920s and 1930s. For example, Arthur Gates, a renowned specialist in reading achievement, in describing the gains found in Lincoln in the 1921-1947 comparison study, notes:

> It is possible that the greater gains shown by the Lincoln study in comparison with those obtained in the present one are a valid illustration of what some students of reading have suspected, namely that the period from say 1920 to 1935, or thereabouts, was one in which relatively great advances were made in methods of teaching reading in American schools, and that progress has slowed down somewhat during recent years...but no conspicuous advance in either has appeared during the past decade....Many educators would not be surprised to find that reading attainment today [December 1960] is even somewhat less than it was twelve years ago, or at approximately the time of the final tests in the Nebraska study.**

Gates' surmise that reading achievement in 1960 was less than that in the late 1940s seems incorrect. However, Gates does express the feeling that achievement does not continually rise generation after generation but may well follow more complex patterns. Another expression that the late 1920s and 1930s were probably periods of very high educational achievement comes from a history of education in New York City:

---

*D. A. Worcester and Anne Kline, Reading Achievement in Lincoln, Nebraska Schools 1921 and 1947 (Lincoln, Neb.: University of Nebraska Teachers College, 1947).

**Arthur I. Gates, Reading Attainment in Elementary Schools: 1957 and 1937 (New York: Teachers College Press, 1961), p. 20.

> Academically able pupils moved in fast tracks and enriched classes into academic high schools, and, if they passed the entrance examination, into the city's elite high schools. Competition for excellence was keen, and from these schools came a generation of remarkable professionals, scholars, writers, scientists, and intellectuals--many of them the children and grandchildren of the new immigration that ended in 1924.*

Comparisons of later periods with the 1930s also indicate that achievement apparently was high during this period.

The available data (and one must remember the scarcity of such data until three or four decades ago), therefore, seem to suggest that it is likely that achievement was high in the immediate immigrant era and that some declines apparently occurred after this. They also seem to suggest, however, that from lows in the mid-1920s to the late 1930s, there was a broad increase in achievement as revealed by several indicators.

In the late 1930s and 1940s again there is evidence of a gradual erosion of achievement in the nation's schools. This evidence in the main derives from comparisons between the 1930s and 1950s which show the 1950s to be apparently inferior in all subject areas including basic skills. Very good evidence indicates that achievement was increasing in the early 1950s, so declines must have occurred chiefly in the 1940s. There is also some direct evidence for one state to support this last premise. Statewide testing results in Minnesota of all high school seniors between 1939 and 1948 show an overall downward trend. The trend is reflected on an English achievement test and shows up among all groups of students: men, women, college-bound, etc. For our purposes the results for all high school seniors are most relevant.

---

*Diane Ravitch, The Great School Wars, New York City 1805-1973: A History of the Public Schools as Battlefield of Social Change (New York: Basic, 1974), p. 237.

MEAN SCORES ON COOPERATIVE ENGLISH TEST
(TWENTY PERCENT SAMPLE)

	Men	Women
1939	131.6	155.7
1940	130.1	152.6
1941*	127.1	148.2
1942	127.4	147.4
1943	126.7	148.3
1944	131.5	147.8
1945	129.0	146.6
1946	126.2	141.4
1947**	119.5	140.2
1948	118.7	140.9

* - Total Sample ** - 17% Sample

Ralph F. Berdie et al., Who Goes To College?: Comparison of Minnesota College Freshmen 1930-1960, Minnesota Studies in Student Personnel Work, No. 12 (Minneapolis: University of Minnesota Press, 1962), pp. 30-31

Scores describing pupil ability over this same time period indicate little change. Thus there is no evidence that incoming students were "less bright" and hence failed to do as well on the English achievement test. At no time after 1939 did mean scores reach the 1939 level for men or women. Although there was a rise for 1944 and 1945, the general trend was downward. There is little likelihood that using a 20 percent sample instead of the complete sample had any effect on the outcomes:

> Among the total high school sample the mean score (for men) dropped from 131 in 1939 to 118 in 1948, a decline of approximately 13 points, or approximately one third of a standard deviation.*

This decline undoubtedly had a complex of causes.**

The Minnesota study states:

> The conclusion seems warranted here that during the ten-year period covered by this one form of the test, high school seniors and college freshmen did less well on this test during the later years than did early students.***

As a matter of interest some results from statewide testing in Minnesota are available after 1948. Data from the mid-1950s to 1972 are available**** and show "that mean scores increased until about 1961-1962, where they plateaued until about 1969-1970 when the mean scores began dropping approximately 1/2 raw score point annually."*****

That achievement tended to rise in the 1950s above the level of the 1940s is demonstrated from the renorming of the General Test of

---

*Ralph F. Berdie et al., Who Goes To College?: Comparison of Minnesota College Freshmen 1930-1960, Minnesota Studies in Student Personnel Work, No. 12 (Minneapolis: University of Minnesota Press, 1962), p. 30.

**Some speculations on these causes are listed later in this work. See pp.

***Berdie et al., p. 31.

****Testing in the program is not mandatory but the participation rate is quite high.

*****Minutes of the Conference of Directors of State Testing Programs, Educational Testing Service, Princeton, New Jersey, November 4-5, 1973, p. 2. From a discussion of Dallis Perry, "A Loss in Test Scores, The Minnesota Experience," University of Minnesota, 1972.

Educational Development (GED). This test renorming showed achievement gains between 1943 and 1955 for all subject areas for a sample of high school seniors numbering approximately 36,000 each year. The overall conclusion of this comparison was that the entire distribution of 1955 scores had shifted up by approximately 5 percentile points over the 12-year period.* Gains were particularly large for mathematics but increases were noted in all areas of achievement. However, even though achievement levels were rising nationally in the early and mid-1950s, they were still below the levels attained in the 1930s. The Gates study of comparative reading achievement in 1937 and 1957 shows the earlier pupils to be superior by grade level. It turned out that 1957 students were better insofar as achievement for a given chronological age was concerned, but for equal years of schooling, perhaps the more interesting treatment variable, the 1930s elementary students were better. The following data were generated from comparisons of the Gates reading test which involved approximately 31,000 pupils in 1957.

MEAN AMOUNTS BY WHICH READING GRADES OF 1937 PUPILS
AT A PARTICULAR GRADE LEVEL EXCEEDED READING GRADES OF 1957 PUPILS
(EXPRESSED IN TENTHS OF READING GRADE)

Grade	Mean	Grade	Mean
3.5	.07	6.0	.21
4.0	.09	6.5	.24
4.5	.11	6.9	.25
5.0	.14	7.5	.28
5.5	.18	8.5	.34

Arthur I. Gates, Reading Attainment in Elementary Schools: 1957 and 1937 (New York: Teachers College Press, 1961)

---

*Benjamin S. Bloom, "The 1955 Normative Study of the Tests of General Educational Development," School Review 64 (1956): 110-124.

Nineteen thirty-seven pupils in a grade-to-grade comparison were superior to 1957 in all grade levels. In fact, the higher the grade, the more the 1930s students outperformed the 1950s students. As noted, when comparing children of the same age, the 1957 children did better, i.e., for a given age they outperformed the earlier pupils, but this is mainly a function of the 1950s students starting school much earlier. As far as amount of exposure time to the school system is concerned, therefore, the 1930s appear to have been more effective than 1957.*

> The first major finding is that in the range from grades 2 through 6, the 1937 children at a particular grade level showed greater (or higher or superior or more advanced) reading abilities than did the comparable 1957 children.**

While the Gates comparisons examine a fundamental skill for a national student population, a study by Joseph Sligo studied achievement differences in more advanced subjects for 1934 and 1954. This study was restricted to selected Iowa high schools, and we note in passing that Iowa high schools have been among the best in the nation as far as achievement is concerned. The general approach of this study was to use old tests for which records of the performance of past groups were still available.* In order to check for possible differences in mental ability between the two groups, intelligence test results were examined. In this area the 1954 pupils were considerably higher. In achievement, on the other hand, the 1934 pupils performed better in all areas.

---

*It is interesting to note that a Department of Health, Education, and Welfare-funded study on reading achievement in 1971 cited the Gates study and summarized it based on age rather than grade, with no mention of the superiority of 1937 children by grade:

> Gates (1961a) compared the reading achievement of children tested in 1957 with the attainment of children tested 20 years earlier in 1937. Some 31,000 children were tested in 1957 with the test on which the 1937 norms were based. Gates reported that 1957 children in the range from grades 4 to 6.5 reached a particular level of reading ability about 5 months earlier than did the 1937 pupils. Essentially, compared to 1937, 1957 pupils were about a half year advanced. Reginald Corder, "The Information Base for Reading: A Critical Review of the Information Base for Current Assumptions Regarding the Status of Instruction and Achievement in Reading in the United States," Educational Testing Service, Berkeley, California, 1971, p. 49. Prepared for the U.S. Office of Education, Grant No. OEC-0-70-4792 (508).

**Gates, Reading Attainment, p. 3.

DISTRIBUTIONS OF PUPIL SCORE MEANS BY TREATMENT GROUPS
FOR EACH TEST INVOLVED IN OVERALL COMPARISONS

Subject Matter Test	1934 Group Mean	1954 Group Mean	Differences
1934 Ninth Year Algebra	14.3	10.9	3.4*
1934 General Science	43.9	42.9	1.0
1934 English Correctness (Ninth Grade)	61.9	45.6	16.3*
1934 United States History	42.4	37.3	5.1*
1933 United States History	47.0	39.3	7.7*

*Differences significant at or beyond one percent level.

Joseph R. Sligo, "Comparison of Achievement in Selected High School Subjects in 1934 and 1954" (Ph.D. diss., State University of Iowa, 1955), p. 152

---

*Joseph R. Sligo, "Comparison of Achievement in Selected High School Subjects in 1934 and 1954" (Ph.D. diss., State University of Iowa, 1955).

The author concludes:

> Four of the five differences observed, those derived from the 1934 test in Ninth Year Algebra, the 1934 test in English Correctness, and the 1934 and 1933 tests in United States History, were statistically highly significant. Each of these differences favored the earlier group. The only measures on which the two groups of schools appeared to be on a par were those derived from the 1934 test in General Science.*

The results of this selective study seem to coincide with Gates' perception of achievement levels in the 1950s compared to those of the 1930s. However, as noted earlier, steady increases in achievement were being made in the 1950s although during this decade these apparently had not raised it enough to equal the levels of the thirties.

A broad comparison of achievement from the early 1950s to the early 1960s by Schrader** showed gains of approximately .2 of a standard deviation over this period. It is interesting to compare this with the Minnesota high school data for the 1939-1948 period which give a .3 standard deviation loss. Both studies concentrate on approximately a ten-year period. If we assume, for the sake of argument, that the trend displayed in the Minnesota study reflected a national trend (there is evidence--as mentioned earlier and as we shall see--that this is a not completely unreasonable assumption), then it appears that achievement is likely to have been falling faster in the 1940s than it was gaining in the 1950s. The Schrader comparison was based on a number of renorming studies undertaken by several well-known standardized test publishing organizations. The comparisons involved all of the basic skill subject areas.

---

*Sligo, "Comparison of Achievement," p. 153.

**William B. Schrader, "Test Data As Social Indicators," Educational Testing Service, Statistical Report 68-77, September 1968, Princeton, New Jersey.

During the 1960s the growth in academic achievement under way since World War II seems to have topped out. Although it is naturally impossible to pin down the change to a single year, many achievement indicators show a turning point after the middle of the 1960s. For this period there are two sources of data: nationally administered tests and statewide tests. The national indicators are useful for a broad picture of this turning point and the state data allow for a close look at local achievement losses. For example, the national renorming studies of the Iowa Tests of Basic Skills (ITBS) carried out in 1955, 1964 and 1970 show the following changes.

IOWA TESTS OF BASIC SKILLS
SUMMARY OF DIFFERENCES IN 1956, 1964 AND 1971 EDITIONS OF NORMS OF PUPIL SCORES
(GRADE EQUIVALENT IN MONTHS*)

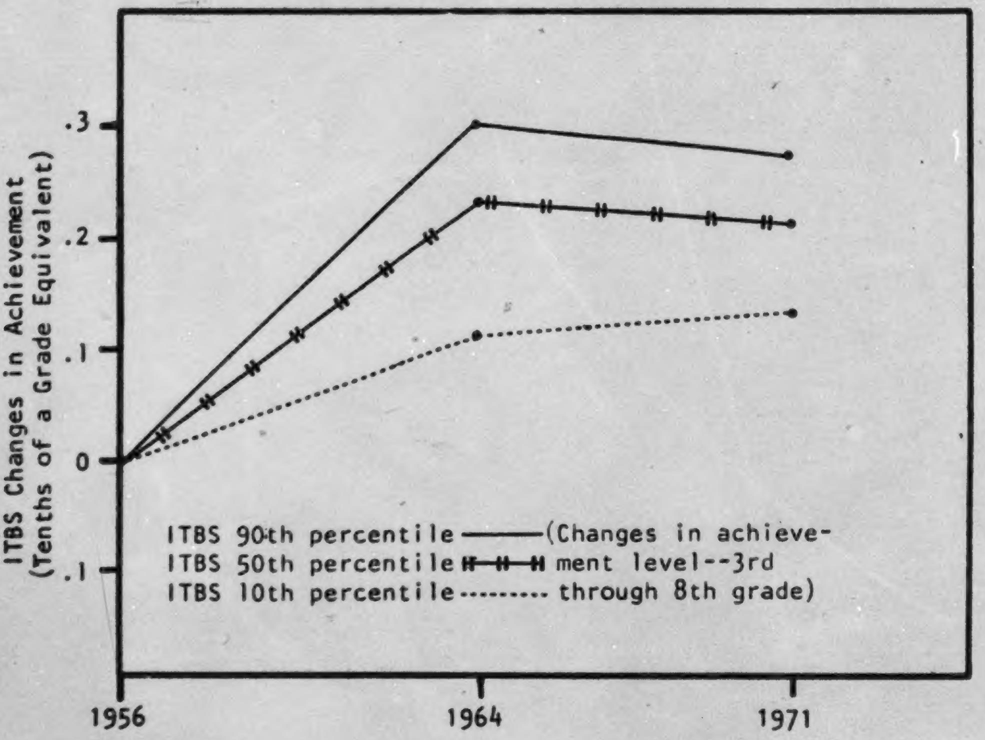
90TH PERCENTILE GRADE		VOCABULARY	READING	LANGUAGE SKILLS					WORK STUDY SKILLS				MATHEMATICS SKILLS			COMPOSITE
				SPELLING	CAPITALIZATION	PUNCTUATION	USAGE	TOTAL	MAPS	GRAPHS	REFERENCES	TOTAL	CONCEPTS	PROBLEMS	TOTAL	
8	'71-64	0.0	-1.5	0.0	1.4	0.0	-2.2	0.0	1.0	1.6	0.8	1.1	-0.9	-3.6	-2.1	-0.4
	'64-56	-1.4	-0.5	5.0	3.0	0.0	3.0	2.8	5.0	3.8	1.8	3.5	7.3	0.9	4.1	1.7
7	'71-64	-1.6	-1.8	1.5	1.2	0.0	-1.3	0.0	0.0	2.3	1.6	1.3	-0.7	-2.6	-1.8	-1.0
	'64-56	3.5	4.0	6.0	4.8	0.0	2.0	3.2	4.4	3.0	4.5	4.0	6.0	2.9	4.5	3.8
6	'71-64	-1.7	-1.9	-2.3	-1.5	0.0	-2.2	-1.6	1.0	0.2	0.6	0.7	-1.9	-2.3	-2.3	-1.2
	'64-56	3.0	1.5	5.5	6.1	2.0	3.5	4.3	5.0	4.4	5.5	5.0	7.8	2.0	4.9	3.7
5	'71-64	0.3	-1.0	-1.1	-2.0	0.7	-1.3	-0.9	1.8	0.9	0.7	1.1	0.9	-1.6	-0.4	0.0
	'64-56	1.0	1.5	1.5	6.7	-4.0	0.0	1.1	0.4	4.5	5.0	3.3	6.6	6.4	6.5	2.7
4	'71-64	-0.5	-0.8	-1.5	-1.7	-0.8	-1.1	-1.4	2.1	0.6	0.5	0.9	1.5	-0.7	0.4	0.0
	'64-56	-0.2	0.5	5.3	7.0	6.0	3.5	5.5	0.7	1.0	4.5	2.1	4.5	2.8	3.7	2.3
3	'71-64	0.8	0.7	-1.0	-1.3	0.8	-1.4	-0.7	1.2	0.0	1.1	0.8	2.0	2.0	2.1	0.5
	'64-56	2.5	4.5	9.0	7.3	6.5	3.3	6.5	3.6	3.7	5.0	4.1	2.0	2.2	2.1	3.9
Mean	'71-64	-0.4	-1.0	-0.7	-0.6	0.1	-1.6	-0.8	1.2	0.9	0.9	1.0	0.2	-1.5	-0.7	-0.3
DIFF.	'64-56	1.4	1.9	5.4	5.8	1.8	2.6	3.9	3.2	3.4	4.4	3.7	5.7	2.9	4.3	3.0
50TH PERCENTILE																
8	'71-64	0.4	-2.1	1.0	0.6	-1.6	-3.1	0.0	0.8	0.9	1.4	0.9	-1.7	-3.1	-2.4	-1.1
	'64-56	-0.8	2.5	2.1	3.3	-2.0	1.6	1.3	2.0	3.2	1.8	2.3	3.4	1.6	2.5	1.6
7	'71-64	1.0	-1.4	1.1	-0.9	0.0	-1.6	0.0	1.2	2.3	2.0	1.7	-2.2	-4.1	-2.8	-0.4
	'64-56	1.8	1.5	4.8	6.6	-2.4	1.4	2.6	3.8	3.7	2.8	3.4	3.5	4.6	4.1	2.7
6	'71-64	0.9	-2.6	-1.4	-2.8	-1.4	-1.6	-1.4	0.7	2.2	0.3	1.1	-2.7	-3.0	-3.0	-1.1
	'64-56	0.8	2.2	1.5	4.5	-0.2	2.4	2.1	2.0	1.2	3.8	2.3	4.4	2.5	3.4	2.2
5	'71-64	1.4	-0.7	0.4	-2.3	0.0	-0.8	-0.5	1.4	3.4	0.7	1.5	0.8	0.6	0.6	0.6
	'64-56	0.8	2.6	4.0	4.4	1.8	2.0	3.1	1.4	1.6	1.8	1.6	3.6	2.6	3.1	2.2
4	'71-64	0.6	-0.6	-1.0	-1.6	-0.6	-2.2	-1.4	1.2	3.5	1.0	1.9	0.6	0.3	0.7	0.3
	'64-56	3.6	2.5	3.4	6.6	3.4	3.2	4.2	1.5	0.5	2.8	1.6	1.9	0.6	1.3	2.6
3	'71-64	1.3	0.5	0.0	-0.6	1.0	0.0	-0.6	0.9	0.3	1.0	0.9	0.7	1.9	1.6	0.4
	'64-56	2.4	4.3	3.0	4.6	1.8	0.5	2.5	1.6	2.5	2.2	2.1	2.8	0.6	1.7	2.6
Mean	'71-64	0.9	-1.2	0.0	-1.3	-0.4	-1.6	-0.6	1.0	2.1	1.1	1.3	-0.8	-1.2	-0.9	-0.2
DIFF.	'64-56	1.4	2.6	3.1	5.0	0.4	1.8	2.6	2.0	2.1	2.5	2.2	3.3	2.1	2.7	2.3
10TH PERCENTILE																
8	'71-64	2.3	-1.0	0.0	0.0	-0.7	-0.9	0.0	0.0	1.5	0.6	0.5	0.0	-3.3	-1.7	0.0
	'64-56	1.2	-1.0	-2.9	-0.6	-4.2	-1.2	-2.2	3.3	2.1	-3.4	0.7	1.8	4.9	3.4	0.4
7	'71-64	4.4	0.0	0.0	0.0	-1.1	0.0	0.0	0.0	4.6	0.7	1.6	-1.6	-3.3	-1.9	0.0
	'64-56	1.1	1.0	2.1	1.1	-1.0	-1.8	0.1	2.5	1.8	5.0	3.1	2.6	4.6	3.6	1.8
6	'71-64	1.7	-1.0	0.0	-0.4	0.0	0.0	0.0	1.0	3.3	1.2	1.3	-2.0	-2.0	-2.2	-0.5
	'64-56	0.0	2.9	1.4	1.6	-0.8	0.4	0.6	0.6	-1.6	3.6	0.9	1.6	3.6	2.6	1.4
5	'71-64	1.6	0.0	0.7	0.0	0.0	0.0	0.0	2.1	2.9	0.2	2.0	1.4	0.9	1.3	1.1
	'64-56	0.0	0.0	1.4	0.0	-1.3	-0.6	-0.1	-0.9	-0.2	0.5	-0.2	2.0	1.2	1.6	0.3
4	'71-64	2.1	0.2	0.0	0.0	0.0	-1.2	-0.3	1.2	1.6	0.1	1.6	0.5	0.8	0.6	0.6
	'64-56	2.4	1.5	1.6	3.4	-1.5	2.2	1.4	0.7	1.2	3.4	1.8	2.0	-1.5	0.2	1.5
3	'71-64	1.1	0.9	0.0	0.0	-0.6	-0.7	0.0	1.6	0.0	0.2	0.5	0.0	1.0	0.8	0.1
	'64-56	1.0	1.5	1.5	2.6	0.1	-0.4	0.9	-0.2	1.1	1.4	0.8	0.0	1.4	0.7	1.0
Mean	'71-64	2.2	-0.2	0.1	-0.1	-0.4	-0.5	0.0	1.0	2.5	0.5	1.2	-0.3	-1.0	-0.5	0.2
DIFF.	'64-56	0.9	1.0	0.8	1.4	-1.4	-0.2	0.1	1.0	0.7	1.8	1.2	1.7	2.4	2.0	1.1

[*] Expressed in months of a school year gain or loss, e.g., in June sixth grade children should test sixth year, ninth month, or 6.9.

A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974), p. 67, table 6.8

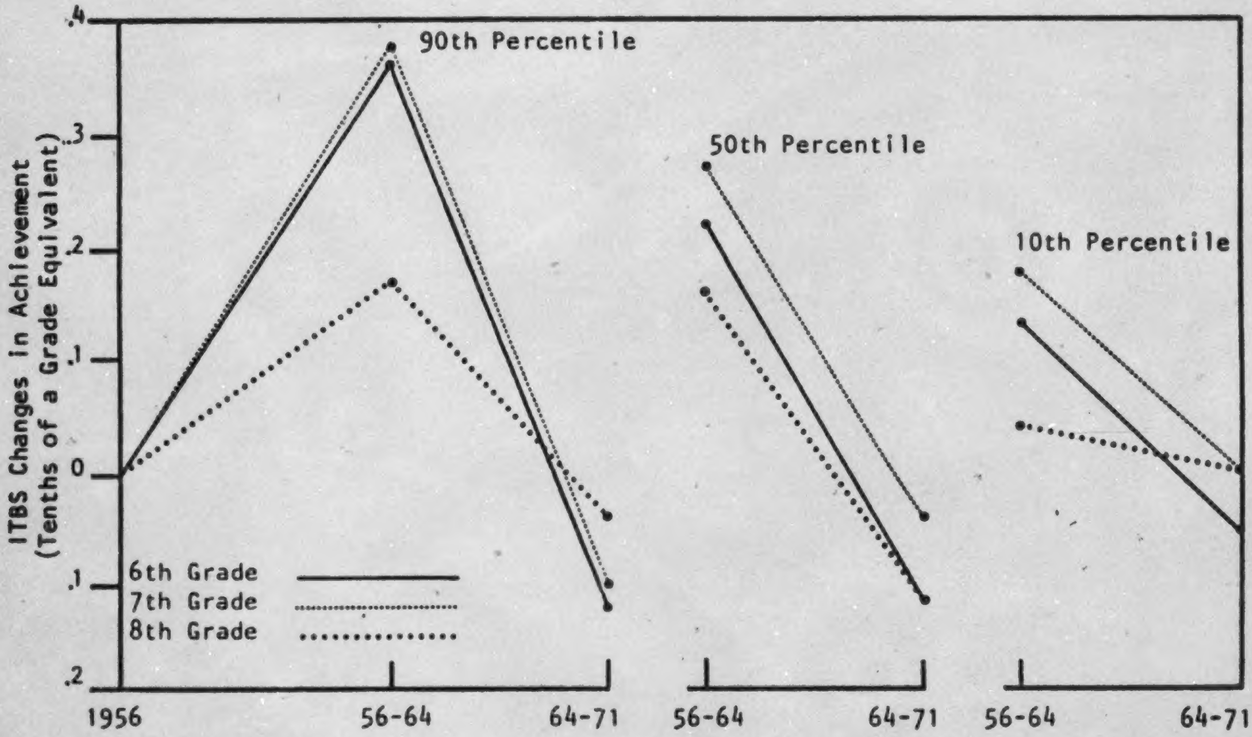
This table has several interesting features. First, note that mean losses in achievement took place over the 1964-1971 period in contrast to the gains picked up over the 1956-1964 period. It is also worth noting that the losses were the greatest for the better students, i.e., .3 for the ninetieth percentile students and .2 for the fiftieth percentile students. The tenth percentile pupils actually gained +.2 over the 1964-1971 period. This is not good news for the lower tenth percentile, however, for as the chart indicates during the 1956-1964 period, it gained 1.1 compared to the 1964-1971 gain of only .2.

NATIONAL TRENDS IN STUDENT ACHIEVEMENT



A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974), p. 67, table 6.8, "Summary of Differences in 1956, 1964 and 1971 Editions of Norms for Pupil Scores"

Another trend in these ITBS data reflects the traditional split between the achievement in the lower and upper elementary grades, in this case the tendency for the lower grades to have improved over the 1964-1971 period while the upper grades have declined. Thus the mean loss is in a sense misleading because it masks the true decline in the upper grades. The ITBS data show the following gains and losses in the three upper grades:



A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974), p. 67, table 6.8, "Summary of Differences in 1956, 1964 and 1971 Editions of Norms for Pupil Scores"

As we will demonstrate, this decline in the higher grades is, in general, also a strong signal in the analysis of statewide data. Over the past few years, the ITBS data seem to indicate that nationally the lower grades have been improving or holding steady and the upper grades declining. In general, the higher the grade, the more the decline is likely to have been. The designers of the current edition of ITBS conclude:

> Between 1955 and 1963 achievement improved rather consistently for most achievement test areas, grade levels, and achievement levels. The average change for the composite was 3.0 months at the 90th percentile, 2.3 months at the 50th percentile, and 1.1 months at the 10th percentile.
>
> Overall, between 1963 and 1970, differences in median composite scores were negligible. However, there were some small but fairly consistent qualitative differences among achievement areas, grades, and achievement levels. In general the changes were positive in the lower grades and tended to balance out in the upper grades. Gains were fairly consistent in vocabulary and work-study skills, but fairly consistent losses occurred in reading and in some of the language skills. Mathematics achievement appears to have improved in the lower grades, but in the upper grades losses in both concepts and problem solving are consistent and sizable.*

A good indicator of the achievement peak in the mid-1960s and a drop thereafter comes from the results of renorming the Comprehensive Tests of Basic Skills in 1973. Comparisons were possible for 1973 versus 1968.

> The Comprehensive Tests of Basic Skills, Form Q was standardized on a national probability sample of more than 200,000 students in February and March of 1968. A year ago this test was given again to a similar but smaller sample of over 10,000 students. The grades covered were 2 through 10.
>
> The data show largely negligible and inconsistent differences in average performance in grades 2, 3, and 4 but lower

---

*A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974).

scores for the 1973 sample thereafter in all areas of the test (reading, mathematics, language, and study skills). The drop is larger the higher the grade.*

Again we see the tendency for the lower grades to be performing better over time and the higher grades to be declining in achievement.

Another indicator of the current achievement drop in the present time is a study of mathematics skills in Iowa for grades six and eight. Tests from 1936, 1951-1955 and 1965 were regiven to pupils in 1973.** The results from each year were compared to the 1973 results. The old tests were given in the same schools in 1973 and results were analyzed item by item. This study is probably important because it takes place in Iowa where many of the problems associated with worsened home environment and student body socioeconomic status, racial strife, etc., are at a minimum compared with the large eastern states. It should be remembered that this study focused on mathematics achievement exclusively.

The outcome of this study was that 1973 pupils were worse than all other students of the previous periods. In some cases the differences in achievement were massive. The study found each of the following to be a significant conclusion:

1. Student mathematics achievement in grades six and eight in 1973 is clearly inferior to the achievement of similar students in 1936 in the areas of problem solving; whole number computation; fractional number computation; and decimals, percentages, and fractional parts.

---

*Donald Ross Green, Senior Research Psychologist, CTB/Mcgraw-Hill, Monterey, California to Richard A. Shaffer, The Wall Street Journal, April 1, 1974.

**Stephen A. Roderick, "A Comparative Study of Mathematics Achievement by Sixth Graders and Eighth Graders, 1936 to 1973, 1951-55 to 1973 and 1965 to 1973" (Ph.D. diss., University of Iowa, July 1973).

2. Student mathematics achievement in 1973 is inferior to the achievement of similar students in 1951-55 in the areas of whole number computation and fractional number computation at grade six, and decimals and percentages and problem solving at grade eight.

3. Student mathematics achievement in grades six and eight in 1973 is inferior to the achievement of similar students in 1965 in the area of problem solving.

4. There is a general trend apparent indicating that 1973 student achievement in problem solving is at the lowest level of any of the years included in this study.

5. There is an indication that 1973 student achievement in whole number computation and fractional number computation is inferior to the level of achievement in 1936 at both grade levels and in 1951 at grade six. Such topics were not included for testing in 1965.*

The students in 1936 were superior at both grades six and eight in all areas tested. This conforms to the earlier observations on the high state of academic achievement found in the schools of the depression era.

Studies that compare the very early sixties with the 1970-1971 period show very small changes. The reason for this seems to be the concavity of the achievement curve during this decade. This makes it possible for the latter comparison to be slightly higher. However when comparisons are made between the mid-1960s and the 1970-1971 period, significant declines are always noted. Renorming of the Iowa Tests of Educational Development in 1971 shows this. Gains between 1962 and 1971 were found for high school students in grades 9 through 12.** Reports indicate the scores since 1971 have been steadily falling. Another example is the reading test given in the "Progress in Education" study of Project Talent. The reading test given to eleventh graders in 1960 was readministered to eleventh graders in 1970.* A tiny gain of 0.04 standard deviations was found. This compares with the .2 standard deviation increase in the 1950s and early 1960s found in the Schrader study. It is very doubtful if such a small gain is statistically significant by the analysis of variance. The Project Talent report concludes:

---

*Roderick, "A Comparative Study of Mathematics Achievement," pp. 255-256.

**Iowa Tests of Educational Development Forms X-5 and Y-5, Science Research Associates, 1972.

> During this period [the 1960s] billions of new dollars have been poured into new reading texts, materials, procedures, enrichment projects, Head Start programs, and a host of other "improvements." The lack of a substantial increase in measured reading comprehension, then, is especially discouraging.**

B. State and City Achievement Test Evidence Over the Recent Past and An Interpretation of Trends in Academic Achievement in General

Not all states administer individual achievement tests, but among those which do, results often seem to bear out the preceding conclusions. We collected such results from twenty-one states and the District of Columbia, from Hawaii to Rhode Island and from Michigan to Texas, states which account for approximately half the country's population.*** Data from several states did not lend themselves to our analysis, but for the others, though the tests and the number of years over which tests were administered differ (in some cases only for two or three years), where there is any "longitudinal" data, one could contend that a pattern seems to exist. Of these states few exceeded in whole or in part a national norm (particularly a norm established in the mid- or early 1960s) in achievement for the upper grades, and a majority of students covered seem to be declining in achievement. Nebraska eleventh and seventh graders in 1972 exceeded in all categories 1971 norms.* In 1972 Rhode Island eighth graders surpassed national achievement norms (established in 1964) in reading, mathematics and language, and equalled the norm in vocabulary.** South Dakota has consistently surpassed national norms throughout the sixties in both ninth and eleventh grades, usually by wide margins. In 1972 the ninth grade exceeded 1970 norms in only two of four subjects tested, and the eleventh grade equalled one norm, exceeded two and scored less in a fourth. Even though they still exceeded the norm, however, the amount by which they exceeded it fell; in all cases the pupils scored worse in 1972 than in 1970.*** Utah reports that the average for all grades lumped into one exceeded the national average in mathematics, science, social studies and total achievement.**** Though West Virginia consistently shows scores just below the national norm for the STS Educational Development Series test, there has been practically no decline in achievement in the data we have covering the 1970-1971 through 1973-1974 school years. Furthermore, contrary to the general national trend, the upper grades hold up just about as well, and in one case (eleventh grade) better than the lower grades.* Mississippi also seems to be holding steady. Under new testing programs, achievement in the fifth and eighth grades rose between the 1972-1973 and 1973-1974 school years, although it had fallen under the previous program between the 1970-1971 and 1971-1972 school years.**

---

*John C. Flanagan and Steven M. Jung, Progress in Education: A Sample Survey (1960-1970, 2d ed. (Palo Alto, Calif.: American Institutes for Research, September 1972), p. 12.

**Schrader, "Test Data As Social Indicators," p. 12.

***State achievement data and some of the city data cited throughout this section can be found in the Appendix, produced by Paul J. Bracken. The following states are covered: Arizona, California, Delaware, Georgia, Hawaii, Idaho, Iowa, Michigan, Mississippi, Nebraska, New Jersey, New Mexico, New York, North Carolina, Ohio, Rhode Island, South Carolina, South Dakota, Texas, Utah, West Virginia. Pennsylvania does not give statewide standardized achievement tests, but the city of Philadelphia does, so it is included.

---

*See the Appendix by Paul J. Bracken, pp. 27-30.

***Ibid*., p. 47.

****Ibid*., pp. 49-50.

*****Ibid*., pp. 53-54.

Some states record only achievement scores for public schools, e.g., Ohio and California; others, e.g., New York, Idaho, Iowa, West Virginia, record test results for both private and public schools. There seems to be no consistent pattern of difference between the achievement trends of states which include private school data and those which do not. Where broken out, nonpublic schools' academic achievement records are higher and may fall more slowly over time in the upper primary grades than do those of public schools, but generally the trend is also down in states which record tests results of all schools.***

In other states for which data appear in the Appendix, one could argue that a consistent pattern seems to emerge: (a) pupils generally tend to fall below achievement norms established in the mid- and late sixties, particularly in grades five and above; (b) in almost all states where achievement test score data exist for a sequence of years, a downward trend is apparent in these upper grades in recent years, regardless of whether the scores were above or below the norm during the first year recorded.[*] In states like New Jersey and Texas, where "criterion-referenced" tests are given, it is very difficult to trace trends. In such a test a judgment is normally made by a committee as to whether percentages of students be rated as "excellent," "good" or "poor" achievers. Such judgments are based on many issues and may be assumed to be less finite measures of achievement, and particularly trends in achievement, than those possible with norm-referenced tests. Nonetheless, samples of raw data (and data from major cities in such states, e.g., Newark, which will be discussed later in this section) and comments seem to indicate a low or dropping achievement level in states administering criterion-referenced tests as well.[**] (Furthermore, detailed data from California and New York show suburban and small city schools falling along with, and at least in the case of New York faster than, the core city schools, so large city school districts apparently cannot be lightly disregarded as barometers for states.[***])

---

*See the Appendix by Paul J. Bracken, pp. 55-56.

**Ibid., pp. 25-26.

***See the Appendix.

The following graphs of reading skills, based on data expressed on a percentile basis in the Appendix, show the falloff in the upper elementary and lower secondary grades in this area since the mid-1960s.

---

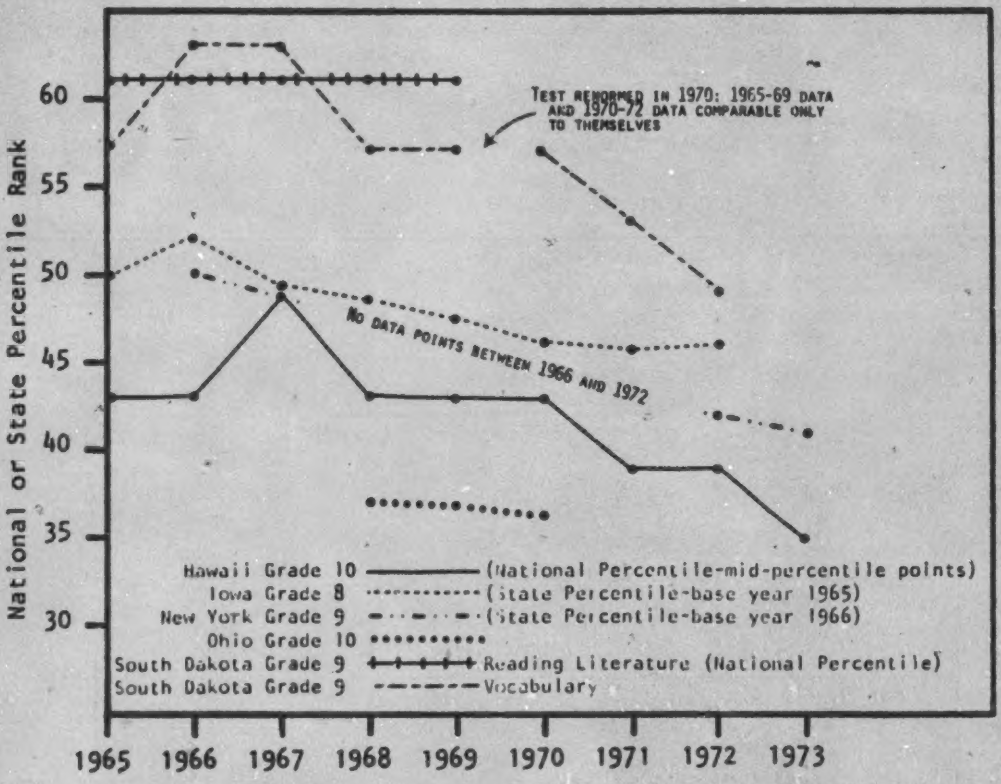
[*] An exception apparently occurs in mathematics achievement in Michigan. See the Appendix by Paul J. Bracken, pp. 23-24.

[**] See the Appendix, pp. 28-30.

[***] See the Appendix, pp. 3-7 and 37-43, and Profiles of School District Performance, California State Testing Program, 1971-1972 and 1972-1973, California State Department of Education, Sacramento, 1974.

Similar data exist for mathematics skills, etc., as well as for reading skills for other grades mentioned in the Appendix, and in general for the upper grades (with the exceptions mentioned earlier) the trends are similar.

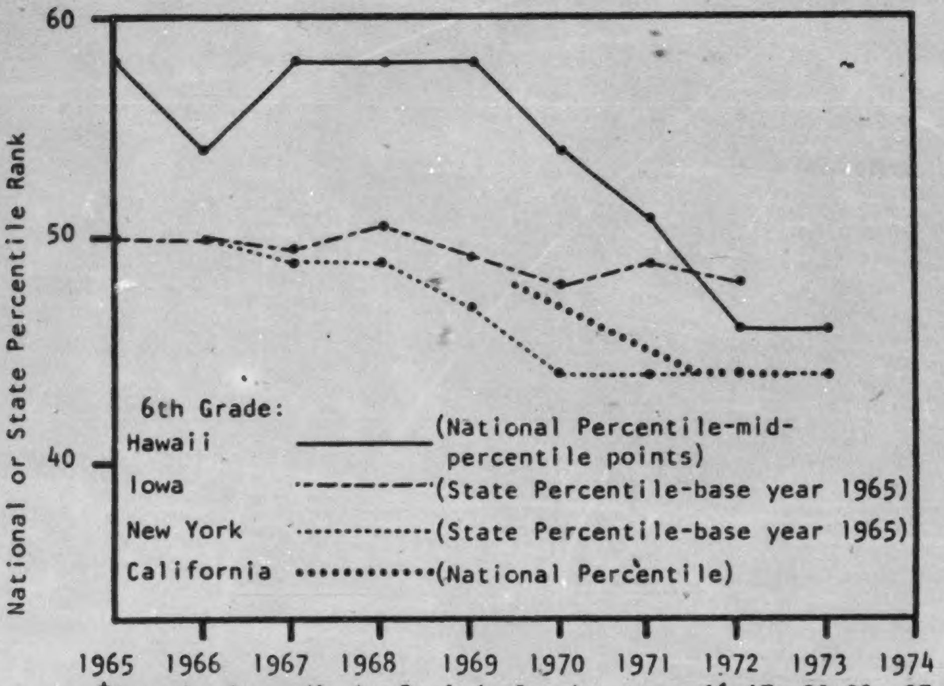
READING ACHIEVEMENT SCORES OF EIGHTH THROUGH TENTH GRADES, 1965-1973*



*See the Appendix by Paul J. Bracken, pp. 16-17. 20-22, 37-43, 46 and 49-50.

Summary Report of Statewide Testing Program 1972-1973, Report No. 83, Office of Instructional Services, Evaluation Section, Hawaii State Department of Education, October 1973; Iowa Basic Skills Testing Program, The University of Iowa; The University of the State of New York, State Education Department, Bureau of Testing and Advisory Services, Pupil Evaluation Program; Statewide Reports, Ohio Survey Tests, 1968-1973, Ohio Testing Services, State Department of Education; Iowa Tests of Educational Development, Guidance and Counseling Service, Division of Elementary and Secondary Education, Pierre, South Dakota

READING ACHIEVEMENT SCORES OF SIXTH GRADES, 1965-1973 *



*See the Appendix by Paul J. Bracken, pp. 16-17, 20-22, 37-43, and 3-7.

Summary Report of Statewide Testing Program 1972-1973, Report No. 83, Office of Instructional Services, Evaluation Section, Hawaii State Department of Education, October 1973; Iowa Basic Skills Testing Program, The University of Iowa; The University of the State of New York, State Education Department, Bureau of Testing and Advisory Services, Pupil Evaluation Program; California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1973

A word of explanation is probably in order here which might clarify part (but by no means all) of one section of the continuing ostensible contradiction in the patterns mentioned above, i.e., we usually find simultaneously stable or even rising mean scores in the lower grades and declining mean scores in the upper grades.* First of all mean scores, particularly when given in grade equivalent figures (e.g., average reading skill of fourth grade, fourth year fifth month--4.5), can be significantly affected in the lower grades by some students achieving exceptionally well. For example, it is not uncommon for several children in a class to read several years above the norm for the lower grades. In computing the average scores, one such child, of course, tends to cancel out the effects of several poor readers' scores in the very low grades, since by definition a third grader cannot be more than three years below the norm. As these children advance through the grades, however, two things happen: first, the poor readers fall farther behind, and second, the "cancelling effect" of the superior students decreases, e.g., a 10th grade "overachiever" cannot score more than 12th grade level, two years above the norm, but a 10th grade "underachiever" can, and often does, score considerably more than two years below the norm.* Even though the dropouts reduce some of the pressure, the reduction is not enough to cancel out this effect, particularly prior to the ninth grade because of compulsory school attendance to age 16 in almost all states. The above, however, does not explain all the reasons for the stability in achievement levels in the lower grades; nor does it explain why the achievement levels in lower grades are in several instances currently rising. The children apparently bring with them to the schools considerable competence and initiative.

---

*See the Appendix by Paul J. Bracken.

A factor which explains the drop in average scores in the upper grades is, of course, simply that subjects get harder, particularly for those not grounded in the fundamentals. (E.g., a child can get by with little knowledge of the multiplication table in the lower grades, but when he must learn long division in the fifth grade, his inability to multiply readily tends to incapacitate him.)

---

*See The New York Times, 1972-1973.

Another interesting pattern that may be emerging, as we have seen in the previous section, is the apparent decline of scholastic achievement of the brighter children and, as we shall see, in the less turbulent schools of the often more affluent suburbs and small cities. Such is likely to be the case if we assume the "bottoming out" of some of our larger cities' achievement, for which we have data, is a pattern that applies to most metropolises. The reason for the bottoming out in the upper grades in these cities is not known. Among the possibilities, however, one should not overlook the chance that in certain cases the scores are so low that they are reaching the theoretical lower limit for multiple choice tests. For example, in 1972 fifty percent of Philadelphia public school eighth graders scored below the fourteenth percentile level in an arithmetic test normed several years earlier for fifty percent of nationwide eighth graders to fall below the fiftieth percentile level.* New York City sixth grade averages for public and private schools were at the twenty-ninth percentile point in mathematics and at the thirty-second percentile point in reading.**

In any event, in New York City in 1972, 71.3 percent of junior high school and 66.3 percent of elementary and junior high students in 1965 were reading below grade level.*** High schools in other big city systems at that time showed similar trends. In the District of Columbia:

---

*See the Appendix by Paul J. Bracken, pp. 57-58.

**Ibid., p. 38.

***The New York Times, March 18, 1973, p. 1.

> ...every objective measurement points to a slow and steady deterioration in the performance level of students.*
>
> ...ninth graders in September 1971 were a month behind the reading level recorded by ninth graders in September 1970. The average was a grade equivalent of 6.4 years in September 1971....**

In 1974 it was reported that 75 percent of Washington's pupils are reading below grade level.***

In 1973 it was stated of New Jersey's largest city:

> The median reading-test score of Newark high school seniors is that of the eighth-grade average for the rest of the nation....Many high school seniors are reading at the level of fifth graders....But other test scores show that students in Newark are not below average in intelligence.****

In 1974 after new test results were recorded "'...the effectiveness in achievement of public elementary education in Newark went down instead of up.'"***** In Baltimore and Philadelphia, 75 percent of pupils read below grade level.

Nor has this problem been confined to the big cities on the east coast. In the midwest, 70 percent of Chicago and Cleveland pupils are reading below grade level.+

---

*Arnold, "Public Schools," in Levitan, ed., The Federal Social Dollar, p. 25.

**Ibid., p. 43. Washington, too, only checks its students against themselves, as it does not administer standard national tests. Like New York, these tests reflect the drop in achievement in District of Columbia schools, not how it compares to other school districts.

***The New York Times, February 15, 1974, p. 16.

****The New York Times, April 30, 1973, p. 64.

*****The New York Times, November 2, 1974, p. 32.

+The New York Times, February 15, 1974, p. 16.

On the other hand, in 1973 the entire New York City school system from the first through ninth grades, with the exception of one grade, showed improvement in reading achievement test scores compared to 1972.[*] In 1974 there were claims of some fraud in the 1973 administration of the tests, though it was said not enough to greatly affect scores, and the 1974 scores were about the same as in 1973. Actually they apparently were slightly below those of 1973,[**] which may be the beginning of a random fluctuation along the "stable" line of New York City's reading achievement scores. In other words, New York City's scores may have bottomed out.

In any event, if the big cities are bottoming out or have stabilized in a slight decline while whole states continue to fall more rapidly, then as mentioned earlier the suburbs and small cities must be falling, and in many cases falling rapidly. Indeed in New York State, which distributes such details, the rate of decline in the average achievement level (based on a percentile level achieved in 1966) in public and private schools in rural areas, suburbs, and small and other "large" cities, is greater than in New York City.

---

[*] The New York Times, February 15, 1974, p. 16.

[**] The New York Times, December 24, 1974, pp. 1 and 17.

AVERAGE PERCENTILE TEST SCORES, PUPIL EVALUATION PROGRAM READING AND MATHEMATICS, GRADE 6, NEW YORK STATE*

	1966	1967	1968	1969	1970	1971	1972	1973
Reading								
New York City	37	36	37	34	32	32	32	NA
Large Cities	47	44	42	40	38	35	35	NA
Medium Cities	54	52	51	48	47	46	45	NA
Small Cities	53	52	52	50	48	47	47	NA
Vl & Lg Central	59	58	57	56	54	53	53	NA
Large Rural	55	53	54	51	51	49	48	NA
Small Rural	52	50	50	50	48	47	46	NA
Total State	50	49	49	47	44	44	44	44
Mathematics								
New York City	34	30	32	30	28	30	29	NA
Large Cities	49	48	46	39	37	33	33	NA
Medium Cities	51	50	48	46	43	43	42	NA
Small Cities	54	52	51	48	46	44	43	NA
Vl & Lg Central	58	56	54	54	51	50	49	NA
Large Rural	59	54	53	51	50	47	45	NA
Small Rural	59	56	54	52	50	47	45	NA
Total State	50	47	47	44	42	41	41	39

*See the Appendix by Paul J. Bracken, pp. 37-43.

The University of the State of New York, State Education Department, Bureau of Pupil Testing and Advisory Services

Data for California, which also publishes testing details, show a drop in the seventy-fifth percentile (the upper twenty-five percent of the class) as well as the twenty-fifth percentile (the lower twenty-fifth percentile of the class) between the 1969-1970 and 1972-1973 school year in all subjects. Indeed in grade twelve the *seventy-fifth* percentile fell faster than the twenty-fifth percentile in *all* subjects. (These latter data coincide with the national ITBS data primary grades mentioned on pp. 42-45, where the ninetieth percentile was faring worse than the tenth percentile.) In the case of California twelfth graders, however, other factors, such as a reduction of legal dropouts, could affect the scores.

CALIFORNIA STATE TESTING PROGRAM RESULTS

GRADE 6

	Reading				Language				Spelling				Arithmetic			
	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973
75TH PERCENTILE																
State Raw Score	71.8	71.4	70.5	70.6	68.4	67.9	66.5	66.7	25.7	25.7	25.5	25.4	84.8	83.2	81.5	81.6
Publisher's Percentile Rank	74	72	72	72	68	68	65	65	73	73	73	64	74	68	65	65
25TH PERCENTILE																
State Raw Score	45.7	45.3	43.7	44.3	44.3	43.2	41.0	41.2	17.6	17.3	16.4	16.3	58.9	56.1	52.9	53.6
Publisher's Percentile Rank	24	23	21	21	21	19	17	17	22	19	16	16	24	21	18	19

GRADE 12

	Reading				Expression				Spelling				Quantitative			
	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973
75TH PERCENTILE																
State Raw Score	29.8	29.4	28.8	28.1	50.8	49.8	48.4	47.3	11.1	11.0	10.7	10.5	19.0	18.7	18.4	18.3
Publisher's Percentile Rank	74	71	71	67	68	65	60	57	72	72	72	72	77	77	74	74
25TH PERCENTILE																
State Raw Score	15.4	15.1	14.9	14.6	30.3	29.6	28.6	27.7	5.4	5.3	5.2	5.0	8.8	8.6	8.5	8.4
Publisher's Percentile Rank	24	24	24	24	22	22	21	19	26	26	26	26	25	25	25	20

California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1974; see also the Appendix by Paul J. Bracken, pp. 3-7.

None of the above is meant to imply that all school districts throughout the country, without exception, are declining in academic achievement. There are some, both urban and suburban, which showed improvement at least in some subjects in recent years in the upper primary and secondary grades. For example, in California the Oakland City Unified District (where 60.2 percent of pupils are Negroes and 8.5 percent are Spanish surnamed), reading ability improved in both the sixth and twelfth grades between the school years 1971-72 and 1972-73. Furthermore, in twelfth grade, language and spelling also improved.* The same held true for the Sacramento City Unified District, and here twelfth grade mathematics also improved over this time period.** We find sixth graders improving in all subjects in some school districts in nonurban areas such as Contra Costa County,*** and even in some urban districts in San Francisco**** and San Diego,***** while twelfth graders improved over this time period in all subjects in some nonurban high school districts in some areas, such as Shasta.+

---

*California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1974, p. 34. It is interesting to note, however, that second and third grade achievement dropped in this district over this time period, a rather rare occurrence these days.

**Ibid., p. 318.

***Ibid., pp. 53-56.

****Ibid., p. 364.

*****Ibid., p. 363.

+Ibid., p. 426.

By and large, however, data on academic achievement trends in primary school upper grades and throughout secondary schools are too consistent to be ignored. The prudent man should entertain the thought that in general our school pupils are in a decline in scholastic achievement and that this decline can no longer be blamed solely on our largest cities and shifting pupil populations.* In fact it is difficult for most individual states to blame declining achievement on changing populations, for it apparently is so widespread throughout the country, including many states and areas within states where the population change is negligible.

Claims persist, however, that because of immigration some school districts and states may have experienced a drop in natural ability (perhaps reflected in the average IQ) among students. Nationwide, of course, this effect should cancel out, but perhaps one should mention a less probable phenomenon which could cause problems in trying to determine what is happening to our school systems. For example, if we are transferring students of IQ levels below the mean from one district to another district with a higher mean IQ, the results should be obvious. The mean IQ of the district to which these children relocate should decrease, and the one from which they came should rise. If, however, we transfer students from a district where IQs are somewhat above the mean for their district but still below the mean for the district with the higher IQ level into which they transfer, then the mean IQs of both districts should fall. If this were true for whole states or regions, it might be confusing, but one doubts that such would be the case consistently; even if it were so and if it were the principal cause of falling academic achievement, one would think the lower grades should be affected as well.

---

*See further in the study and the Appendix for some demographic data on shifting minorities and their inferior achievement records, as well as data on the trivial shift in California over this time period. See also the Appendix by Paul J. Bracken, p. 31, for improvement in Negro achievement in New Mexico while Anglo achievement remained unchanged.

It may be useful at this point to mention again the issue of private schools. We mentioned earlier that states including these pupils in computing achievement records also generally show drops in academic achievement levels, but it is also worth mentioning that the number of private school pupils has decreased, particularly in high school. In California private school pupils in the time periods covered above decreased from 8.1 percent of the student population to 6.7 percent, and the private high school population fell from 7.3 percent to 4.0 percent. In Hawaii the same figures for all private schools were 13.1 percent of the school population in 1969 and 10.5 percent of the school population in 1973; private high school figures were 20 percent in 1969 and 8.5 percent in 1973, etc. Nationally private school enrollment fell from 15.5 percent of the total in 1960 to 13.4 percent in 1970 and 13.1 percent in 1973; the figures for private high school pupils were 9.8 percent in 1960, 8.2 percent in 1970 and 7.8 percent in 1973.* One would assume that a diminishing private school population should decrease any distorting effect due to the exclusion of these pupils' achievement scores from state data.

Educators like to point out that the better pupils with the most interested parents are leaving the public school system, which they claim reduces median achievement scores for public schools (obviously a claim which becomes harder to substantiate as private school student achievement erodes). Even with the dropping enrollment in private schools, particularly high schools, however, this claim might still have some merit--a shrinking but increasingly elite nonpublic school student body--if it were not for the drop in achievement among private school students too, where they are identified, and the drop in overall state scores where private school scores are excluded.

---

*Statistical Abstract of the United States: 1974, p. 110, table 173.

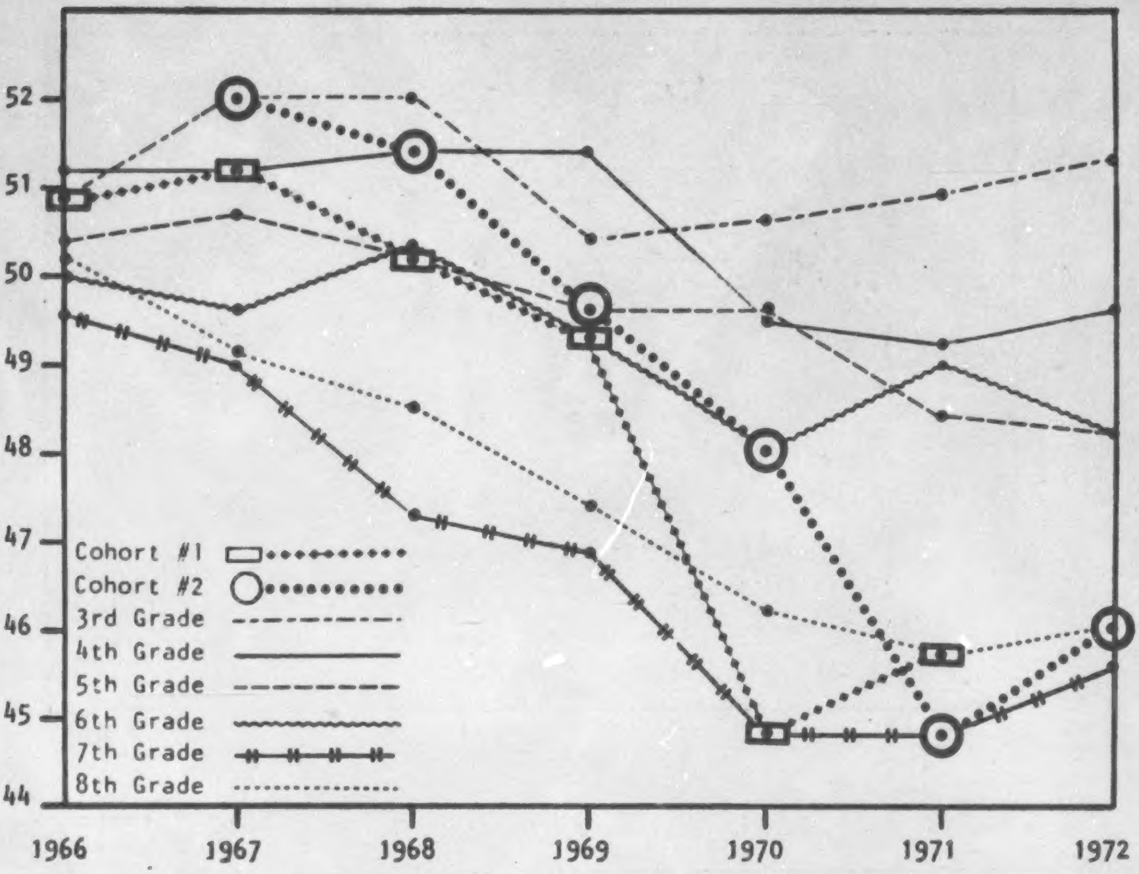
There are some other perhaps more interesting data which probably should be mentioned. These data apparently indicate that large cohorts of children who show a certain level of achievement (which is normally thought to reflect a certain mean IQ level, and often a socio-economic level, etc.) have tended to show a lower (or even higher) achievement level, expressed in terms of percentile scores, depending on the achievement level record of the grade they entered. These data showed that cohorts of pupils, scoring high percentile means for their grades, when promoted into grades where the achievement record for the grades was at lower percentile means than those they left, scored below their old percentile means when they entered these new grades. Perhaps most important, cohorts who were comparable in academic achievement according to identical tests taken in different years for one grade tested significantly differently one or two grades later when given identical tests for that grade in different years, depending on the achievement trend for that grade in the time period spanning the dates when the different cohorts took the test. Furthermore, when cohorts entered grades where the achievement level, expressed in the percentile means for their grades, was higher than the cohorts' past grades' mean percentile scores, and then in a following year they again entered grades with lower mean scores, they scored _higher_ in the first instance, then _lower_ again in the next.* In other words, these data seem to indicate that, at least in these cases, the trend of the _grade_ mean percentile score seemed to control independent of the characteristics of each cohort.

The following traces of reading achievement scores of cohorts of pupils from the third through the eighth grade in one state, the fourth through tenth in another, and the third through ninth in a third state. are examples of this phenomenon.

---

*See the Appendix by Paul J. Bracken, pp. 16-17 and 20-22.

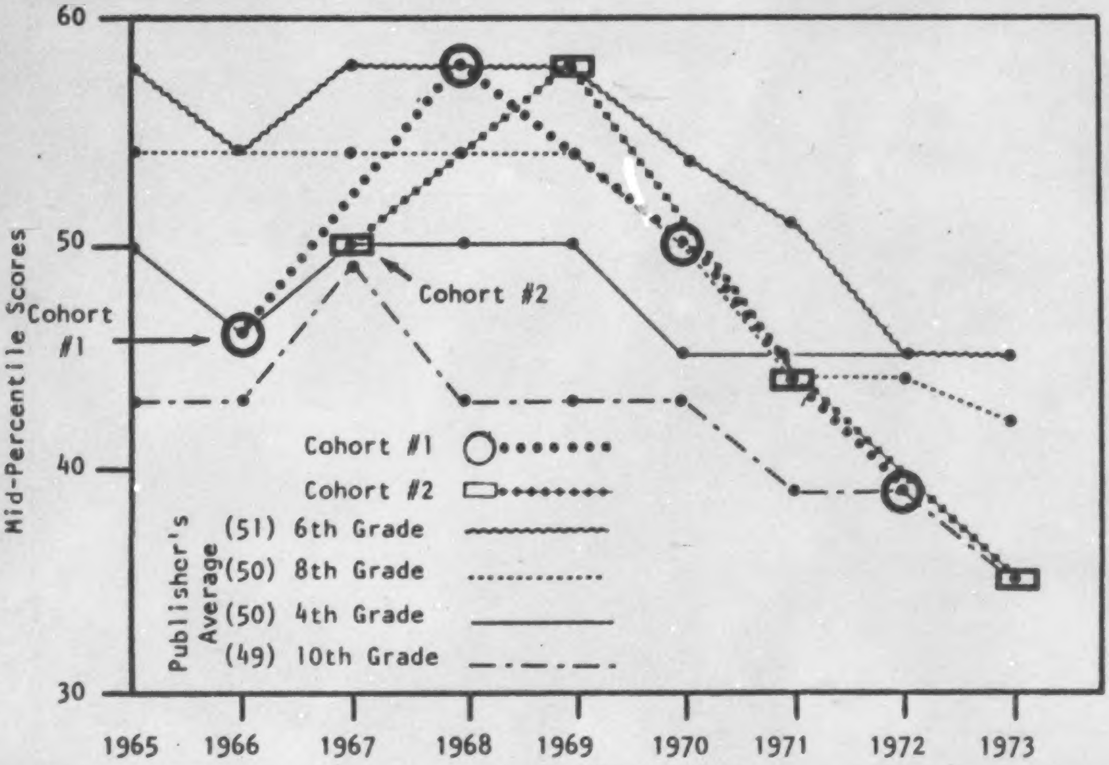
READING SKILL PROGRESS OF PUPIL COHORTS AND TRACES OF READING ACHIEVEMENT SCORES FOR THIRD THROUGH EIGHTH GRADES, IOWA, 1966-1972*
(1965 "BASE-YEAR" PERCENTILE RANKS**)



*See the Appendix by Paul J. Bracken, pp. 20-22.

**The fiftieth percentile point for each grade in 1965 is the starting point. Iowa Basic Skills Testing Program, The University of Iowa.

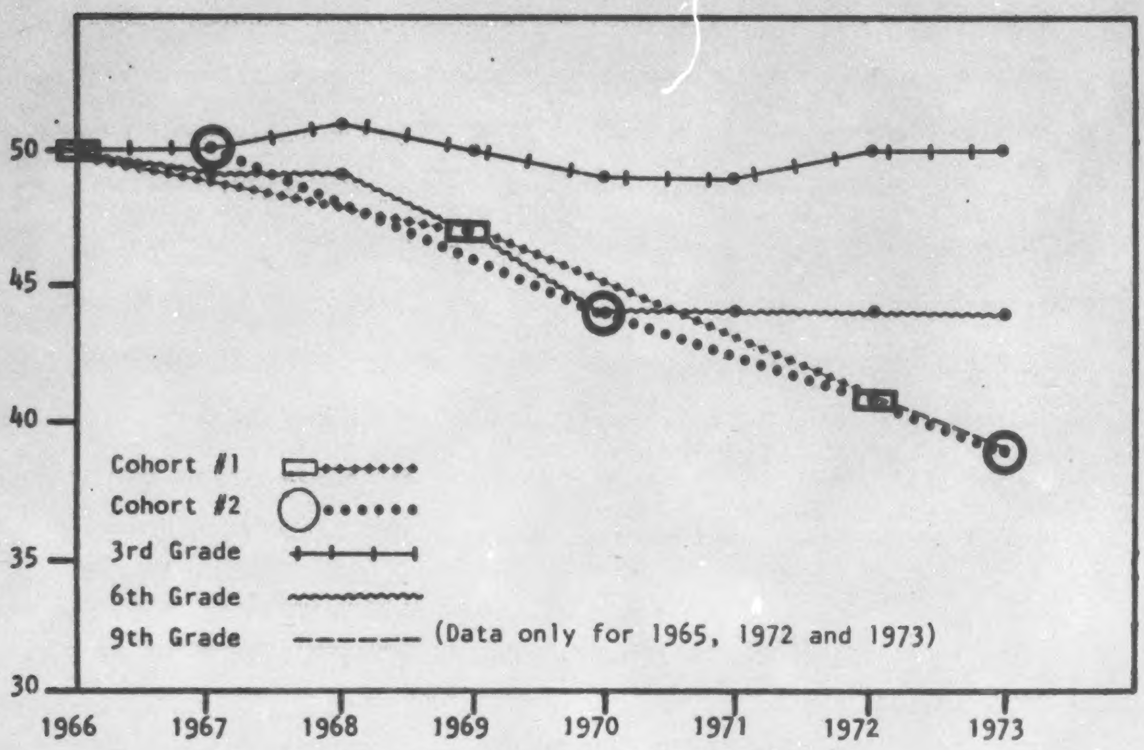
READING SKILL PROGRESS OF PUPIL COHORTS AND TRACES OF READING ACHIEVEMENT SCORES FOR THE FOURTH, SIXTH, EIGHTH AND TENTH GRADES, HAWAII, 1966-1972*
(MID-PERCENTILES)



*See the Appendix by Paul J. Bracken, pp. 16-17.

Summary Report of Statewide Testing Program 1972-1973, Report No. 83, Office of Instructional Services, Evaluation Section, Hawaii State Department of Education, October 1973

READING SKILL PROGRESS OF PUPIL COHORTS AND TRACES
OF READING ACHIEVEMENT TEST SCORES FOR PUBLIC AND PRIVATE SCHOOLS,
THIRD, SIXTH AND NINTH GRADES, NEW YORK STATE, 1966-1973*
(PERCENTILE RANK OF MEDIAN RAW SCORES, PUPIL EVALUATION
PROGRAM, BASE YEAR 1965)



*See the Appendix by Paul J. Bracken, pp. 37-43.

The University of the State of New York, The State Education Department, Bureau of Testing and Advisory Services, Pupil Evaluation Program

The initial scattering of the grade mean scores on the base year charts is normal, since no cohort of pupils is exactly like the next one. Beyond this point, however, the trace lines of the grade mean scores, particularly in the upper grades, are more difficult to explain. The trace lines should converge again, or reverse themselves (e.g., seventh grade higher than sixth, eighth higher than fifth, etc.), in other words, behave in a random manner. One might say that the cohorts of pupils in the base year were so atypical that they never occurred again. One might also say that over all pupils in the upper grades alone have become less intelligent over the years but those in the lower grades have not. One might say that the lower grade tests were easier and the upper grade tests more difficult, but that the base year just happened to have an atypically intelligent group of upper graders, and this situation has not been repeated.

On the standardized national test given in Hawaii, some of the objections mentioned above are perhaps less likely to apply. The base for these percentile scores is a set of scores acquired when the test was normed by the publisher. As indicated earlier, norming consists of administering the test to a very large representative national sample of pupils and determining the distribution of test scores. The argument in this case, of course, might be that the publisher's sample was atypical, or even that certain grades in the state were atypical in the 1965-1970 time period. Beyond 1969 all the grades began to fall so that the ones which were atypically high above the publisher's average decreased to it, thus becoming typical of the sample group. Then, however, they continued to decline, becoming once more atypical, and those that were below early on never did increase to the norm, so they remained atypical. In this case, of course, the theory that one test was easier is hard to support. In light of the 1969-1972 data the sixth grade test somehow would have had to become more difficult in the late 1960s and early 1970s, e.g., Hawaii sixth grade scores in 1965 were higher than the fourth and eighth grade scores for that year, yet in 1972 the sixth grade scores on the same test had fallen below both the fourth and eighth grade scores of 1969. Furthermore, all these data show that cohorts who tested equal to or even superior to previous cohorts when both groups were in a lower grade suddenly test the same as previous cohorts in next grade, then test much lower than previous cohorts in the later grades, etc.

An objection to the national test data might be that in this case, Hawaii, a "mid-percentile point" is used (based on a "band" within which a pupil's achievement test score should fall) which is a little vague, and since the difference among some of the class traces is small enough that the band may cover more than one trace, this objection may be valid. On the other hand, if one assumes the mid-percentile point does not vary radically over time, and if one assumes that the fact that the lowest grade drops the least over time (so typical of all the states) means that these scores do indeed trace relative levels of achievement, then one feels the cohort traces should also hold. Furthermore, regardless of the type of test given over time the patterns are too similar to be summarily dismissed.

Arguments that the fundamental characteristics of the cohorts changed significantly in the span of, in one case, one year, and in the worst case, three years, seem a little weak. Socioeconomic status and IQ of an entire cohort in Iowa should not change much in a year, or even three or four years. The same should hold true for Hawaii. Even in New York, since the private schools are included in the study and upstate scores are falling faster than the City's, changing population seems a somewhat weak argument. Nor is there any strong evidence that over all parental attitudes have changed significantly toward a cohort of children's education, particularly in the span of a year or two.

In any event, in examining these data one is struck by the apparent importance, at least in these instances, of the trend in the grade over the years, despite the characteristics of the children in it. Cohorts of children of apparent identical academic competence, according to standardized tests, within a time period where significant changes in the mean IQ, socioeconomic level, etc., of the cohorts were quite unlikely,* tended to differ significantly in achievement in the following year, i.e., an individual cohort would fall in achievement if the grade it entered had a record of poor academic achievement at the time it entered, and rise if the new grade's record was good. (Of course, as indicated earlier, in Iowa, New York and Hawaii, as in so many other states, the late sixties and seventies show a general decline in achievement in all the upper grades simultaneously; data in these three states just happens to be adequate to show an attendant drop in comparative cohorts moving through them.)

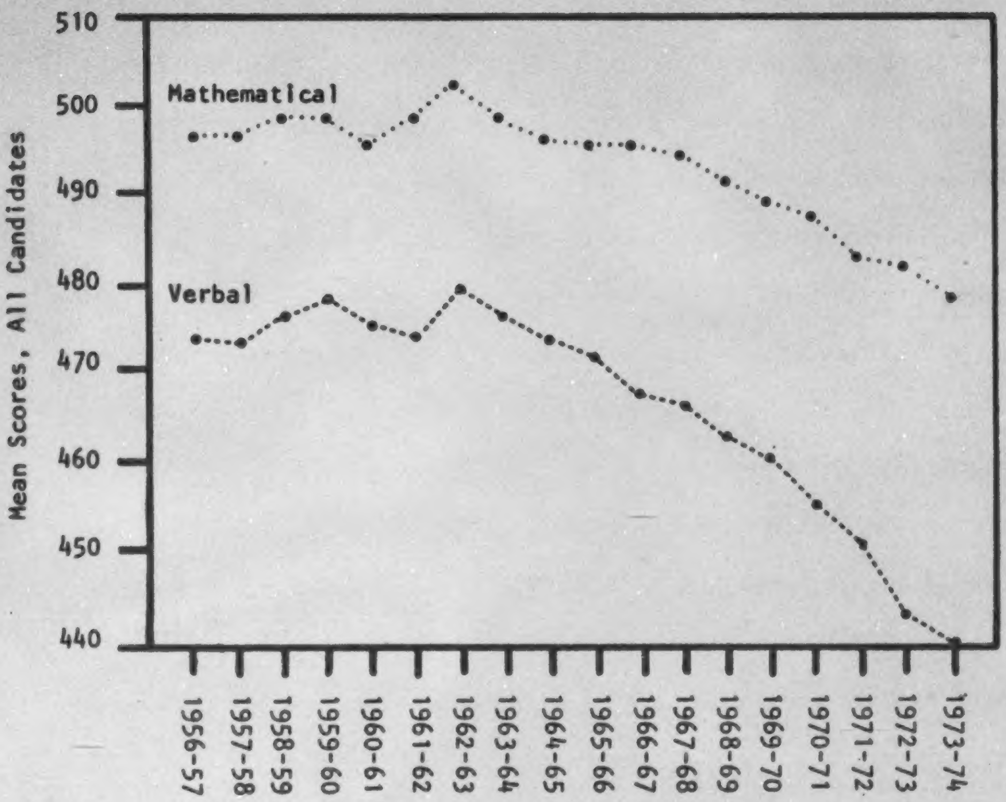
---

*It should be noted that these data, with the possible exception of the tenth grade in Hawaii, are all within the realm of traditional predropout student cohort groups. Since long before World War II children have been forced by law in most states to remain in school until the age of 16.

In the face of this evidence of apparent significant changes in differences in academic achievement among entire cohorts of children over short periods of time, the prudent man must add other probable causes for this phenomenon to the often repeated factors of changing population, poor socioeconomic conditions, ethnically incompatible teachers, excessively high pupil-teacher ratios (which had been falling throughout this period), etc. One must now look at the schools themselves as well as at the parents and society, the teachers and curriculum, buildings and audiovisual equipment, teaching methods, discipline and amount of teacher effort, and pupil-teacher ratios. Such factors, and perhaps only such factors, in the schools themselves could cause such rapid change, could reduce relative percentile academic achievement levels of given cohorts in a single year or two. Heretofore we may have experienced somewhat of a blind spot in looking at our educational problems.

The College Board Scholastic Aptitude Test (SAT) is the final publicized, standardized achievement test taken by more of our high school students who feel they may enter college than any other. This is in some sense a test of the fruits of eleven to twelve years of education for our most intelligent students. The trend of this test is clear. We find a consistent drop in the mean SAT scores over the past eleven years, which is graphically depicted on the following page.

MEAN SCHOLASTIC APTITUDE TEST (SAT) SCORES FOR ALL CANDIDATES



College Entrance Examination Board, New York, New York

Although many reasons have been advanced by educators to account for this drop in SAT scores, none has considered it in the context of other achievement trends. Compared with achievement data resulting from nationally standardized tests and statewide testing programs, discussed earlier, it would be surprising if the SAT scores did not decline.

The main reason for the decline in scores, according to many educators, however, was that with the increasing number of students encouraged to take the test, those tested no longer represented just the "cream" of the student body, so the average scores were bound to fall. The trouble with this explanation is twofold. First, from the very beginning of this decline in the early 1960s, there were indications that even the "cream-of-the crop" students were also declining in achievement. (As we have seen in the comparison of scores on the Iowa Tests of Basic Skills, the top students suffered the greatest decline in achievement. Similarly, we saw a decline in the seventy-fifth percentile of twelfth grades in California which exceeded the twenty-fifth percentile pupils.) By definition such a test as the SAT should make the top-scoring students readily identifiable; the absolute number of top-scoring students should remain about the same (or actually increase, since the high school student body expanded during this time), regardless of how many of the lower scoring students were included. What actually happened, however, was that the absolute number of students scoring between 750 and 800 (the highest possible score) also seems to have decreased. In the year between 1972 and 1973 the number of male high school grades scoring between 750 and 800 on the verbal portion of the test declined from 1,573 to 987.*

---

*The New York Times, December 16, 1973, p. 26 L.

Second, while it is true that the number of test-takers increased in the 1960s, from 933,000 candidates in the 1962-63 school year to 1,606,000 in 1969-70, the number of candidates declined to 1,354,000 in 1973-74.[*] Yet the scores continued to drop. During this period, the verbal aptitude scores dropped at about twice the rate of the mathematical scores, but both plummeted at a faster rate than they had during the prior five years, when the number of students taking the test was increasing. It also seems that the spread of candidates over the years has not changed very much. For example, in 1959-60 the standard deviation on the SAT verbal was 108 points, and in 1968-69 it was also 108 points.[**] According to the Educational Testing Service, this examination "changes little from year to year in the kinds of questions asked."[***]

Some educators and testers still are reluctant to admit that these youngsters are not as well educated as those in the past. Some say, "if anything...they have been getting slightly brighter over the years," and give as reasons for the poorer scores explanations from the hardly plausible to the somewhat plausible. For example, some claim that the recent declining scores result from the fact that since the tests are not compulsory, "the test group varies from year to year...."[****] This should logically mean that the scores should vary, going up one year and down the next, but they have not behaved this way since the late 1950s and early 1960s. The declines from the mid-1960s to the present have been consistent, eleven consecutive years of drops on the SAT verbal test, and with the exception of 1966, when the score remained the same as in 1965, the same is true for the mathematical test. A well-known rule of thumb from the field of statistical quality control asserts that seven consecutive drops in a trend probably mean that the process under observation is out of control. It is statistically valid to claim that the drop in SAT scores is significant--that there is some assignable cause that accounts for the drop. Note that in the late 1950s and early 1960s the mean SAT scores fluctuated as if the changes were truly random--up and down over time. Since then, the consistent drops make a sharp contrast to the formerly random pattern.

---

[*] College Entrance Examination Board, New York, New York.

[**] William H. Angoff, ed., The College Board Admissions Testing Program: A technical report on research and development activities relating to the Scholastic Aptitude Test and Achievement Tests (New York: College Entrance Examination Board, 1971).

[***] Time magazine, December 31, 1973, p. 45.

[****] Ibid.

At the other end of the spectrum is the explanation that more juniors are taking the SAT and fewer are repeating the test as seniors.* This could have made a difference if the number of juniors compared to seniors taking the test had been constantly increasing, but one doubts even this explanation. Juniors usually take this test in the spring; if they repeat it they usually take it the following November or December. About 25 percent of the scores made on the test by seniors are lower than those they made as juniors. About a decade ago it was expected that, on average, repeaters would improve their SAT scores by about 20 or 30 points. This would mean that repeaters would have to have virtually disappeared to drop the scores this much. Even if this were so, however, it would not explain the drop, for we know that the average increase in the scores made by repeaters on their SATs in the senior year over the junior year has also been steadily declining over this same time period.

---

*The New York Times, December 16, 1973, p. 26 L.

In point of fact, all these arguments against the conclusion which "many parents fear, that American schools just are not doing as good a job of developing verbal and mathematical skills as they used to do...,"[*] have grown less convincing with time, and will continue to do so if College Board scores continue to fall. Now

> "authorities indicate...that increasing attention may be given to the possibility that the lower scores stem not from more youngsters taking the test--as has been believed--but from an education that does not equip them well for the test, which measures developed abilities."[**]

An official of the College Board said that "the explanation regarding increasing numbers taking the test might not be as sound as it seemed at first."[***] With the continuing drop in SAT scores, most recently another such official stated flatly that the explanation "does not hold up."[****]

---

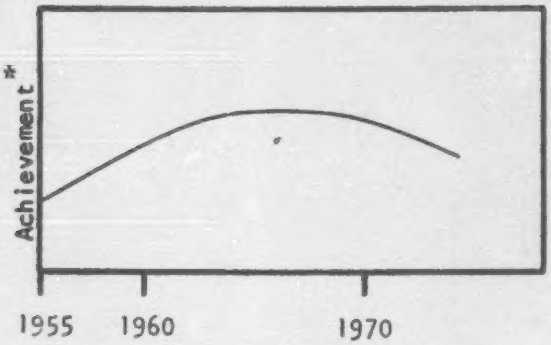
[*] Time magazine, December 31, 1973, p. 45.

[**] The New York Times, December 16, 1973, pp. 1 and 26 L.

[***] Ibid., p. 26 L.

[****] Time magazine, March 31, 1975, p. 67.

We would argue that national achievement levels in primary and secondary schools in the 1960s probably took approximately the following shape:



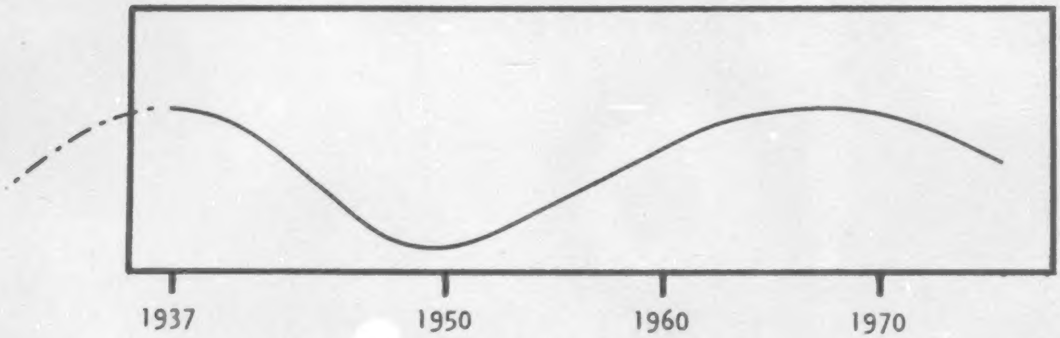
*See Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, and section B, "State and City Achievement Test Evidence Over the Recent Past and an Interpretation of Trends in Academic Achievement in General."

John C. Flanagan and Steven M. Jung, Progress in Education: A Sample Survey (1960-1970) (Project Talent), 2d ed. (Palo Alto, Calif.: American Institutes for Research, September 1972); William B. Schrader, "Test Data As Social Indicators," Educational Testing Service, Statistical Report No. 68-77, September 1968, Princeton, New Jersey; College Entrance Examination Board, New York, New York; data from A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974), p. 67, table 6.8, "Summary of Differences in 1956, 1964 and 1971 Editions of Norms of Pupil Scores"

When speculating on the 1960s a convex pattern would describe the available data. Statewide achievement test results and nationally standardized tests all follow this type of pattern.

If we were to speculate further on an achievement curve from the late 1930s to the present, we would argue that, based on all data mentioned in this and the previous section, it would look somewhat as follows:

APPARENT CYCLICAL ACHIEVEMENT CURVE*



*See Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, and section B, "State and City Achievement Test Evidence Over the Recent Past and an Interpretation of Trends in Academic Achievement in General."

John C. Flanagan and Steven M. Jung, Progress in Education: A Sample Survey (1960-1970) (Project Talent), 2d ed. (Palo Alto, Calif.: American Institutes for Research, September 1972); William B. Schrader, "Test Data As Social Indicators," Educational Testing Service, Statistical Report No. 68-77, September 1968, Princeton, New Jersey; Joseph R. Sligo, "Comparison of Achievement in Selected High School Subjects in 1934 and 1954" (Ph.D. diss., State University of Iowa, 1955), p. 153; Mabel E. Boss, "Reading, Then and Now," School and Society 51 (1940): 62-63; Elizabeth L. Woods, unpublished data from the Division of Psychology and Research, Los Angeles Public Schools, Los Angeles, California, as cited in J. Raymond Gerberich, "The First of the Three R's," Phi Delta Kappan 33 (1952): 346; Percy R. Davis and M. Evan Morgan, A Balanced Educational Program for Santa Monica (Santa Monica, Calif.: Board of Education, 1940) as cited in Gerberich, p. 346; College Entrance Examination Board, New York, New York; A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974), p. 67, table 6.8, "Summary of Differences in 1956, 1964 and 1971 Editions of Norms of Pupil Scores"

In addition to this plethora of statistical evidence there is much anecdotal evidence and statements (some of them very emphatic) by university professors leading to the opinion that the high schoolers we have been sending to college in recent years have not measured up, e.g.,

> Students in similar [creative writing] programs today, according to my experience all over the United States, can no longer spell, can no longer construct a simple English sentence, much less a paragraph, and cannot speak. We have the most inarticulate generation of college students in our history....But what is really distressing is that this generation cannot and does not read. I am speaking of university students in what are supposed to be our best universities. Their illiteracy is staggering.*

Hard evidence of the accuracy of the prophetic nature of the thrust of this 1970 commentary is the current increase in college students who lack competence in this area.

> The number of freshmen taking remedial English at Eastern Michigan University in Ypsilanti has doubled in the last four years, for example. Some 45 percent of the students at the University of California are similarly taking remedial English and stories of "functionally illiterate" students who are skilled in verbal expression but who stumble in reading and writing are becoming common.**

Campuses, including four-year colleges, have been sending back word to publishers that textbooks "are 'too hard' for students to grasp." Many ill-equipped high school graduates entering college these days are "reading on a junior high school level, while traditionally most college textbooks are prepared on a readability level of upper senior high school to college level." New college-level textbooks are being scaled down to this lower capability with "fewer abstractions and more repetition of concepts," etc.[*]

---

*Karl Shapiro, "Is This Really the Brightest Student Generation?," speech before the California Library Association, San Francisco, as reported in Human Events, July 11, 1970.

**The New York Times, November 7, 1974, p. 47.

It also appears that many school teachers and college professors are far from unanimous in feeling current students were as well grounded in mathematics.[**] Another noted educator warned in 1969 of general "privation" in thinking and decision-making ability among recent products of our secondary school system.[***] Such observations are quite common when talking to almost any group of thoughtful professors about students of the late 1960s and early seventies.

Nor is the evidence enumerated above the only which a prudent man must consider. It has recently been reported, for example, that an estimated "19 million Americans over 16 were functionally illiterate," unable "to read job application forms, drivers license examinations and newspaper want ads" or to distinguish between medicine bottles by reading simple labels.[****] This statement might be based on a Harris survey for the Department of Health, Education, and Welfare in 1971, in which each person was given a test on such subject matter. This survey showed 15 percent of people over 16 years of age illiterate by these standards. Negroes showed 32 percent illiterate, white 11 percent. Among high school graduates, 13 percent were illiterate and among those with some college and college graduates, 7 percent. Those 50 and over and 16-year-olds had particularly high illiteracy rates.*

---

[*] The New York Times, November 7, 1974, p. 47.

[**] Morris Kline, Why Johnny Can't Add: The Failure of the New Math (New York: St. Martin, 1973), pp. 111 and 112.

[***] Joseph J. Schwab, College Curriculum and Student Protest (Chicago: The University of Chicago Press, 1969), p. 36.

[****] The New York Times, June 29, 1973, p. 40, quoting the Secretary of the Department of Health, Education, and Welfare.

Perhaps more disturbing are the results of an earlier survey of literacy (by test) of 12- to 17-year-olds between 1966 and 1970, and reported in December 1973 by the U.S. Department of Health, Education, and Welfare. The data indicate that 4.8 percent of these adolescents tested could not read at "the beginning of the fourth grade level." More than one in five Negro boys (20.5 percent) in that age bracket could not read at that level, e.g., simple paragraphs such as the following:

> It was spring. The young boy breathed the warm air, threw off his shoes and began to run. His arms swung. His feet hit sharply and evenly against the ground. At last he felt free.**

Furthermore, it is claimed by some that functional illiteracy "has shown no sign of abating with illiteracy levels remaining constant for the past 20 years."*** (If true, this would be very disturbing, considering the fact that by 1972 the percent of the population over 25 years of age which had received eight full years of schooling had risen to over 88 percent, and those with five to seven years to almost 92 percent. Of those between 25 and 29 years of age, 99.2 percent had five or more years of school.****)

---

*"The 1971 National Reading Difficulty Index: A Study of Functional Reading Ability in the U.S. for The National Reading Center," August 1971, Louis Harris and Associates.

**U.S. Department of Health, Education, and Welfare, National Health Survey, Series 11, No. 131, December 1973, "Literacy Among Youths 12-17 Years: United States," Publication No. (HRA) 74-1613 (Wash.: G.P.O., 1973), Appendix I, p. 1.

***Wallace Roberts, "Right to Read: Lost in PR," The Washington Monthly, September 1973, p. 35.

****Statistical Abstract of the United States: 1973, p. 115, table 175.

On the other hand, the New York City School system's Bureau of Educational Research, in explaining why the city showed up badly in 1971 in comparison to the national average of reading ability of pupils, stated that "In general, the pupils in the 1970 national sample were better readers than pupils in the 1958 sample [that used for comparison purposes prior to 1971]."* This may have been a true description of the ability of the two samples of students at the different dates when the test was normed, but New York City reading scores continued to decline in 1972 below the 1971 achievement levels, even though both results were compared to the same new 1970 national norm. Well meaning as such statements are, therefore, when linked with subsequent declines they have tended to confuse parents and policy makers alike. In fact this discussion of relative achievement of pupils of one time period compared to those of another sometimes becomes quite philosophical:

> ...every two or three generations the level of mastery that will be regarded as poor, average or advanced is likely to change.
>
> The amount of knowledge possessed by the 10-year-old son of a doctor living in 17th-century rural Massachusetts was probably far below that possessed by a 10-year-old boy in Harlem in 1973. Yet the former was probably classified as intellectually precocious in 1690 because he was compared with Indian children living outside the village, while the black New York child is classified as retarded with respect to the white middle-class child living in Forest Hills.**

There may be some validity to the point of the injustice of comparing high IQ children with low IQ children, but not when the low IQ children fall below a certain minimum requirement. In any event the above statement seems a little too stark. One doubts that a doctor's 10-year-old son, even in 1690 rural Massachusetts, would be considered "intellectually precocious" if his ability to read or do simple ciphering were as limited as that of countless 10-year-olds in today's Harlem.* The discrepancies which become obvious when we compare children who all are "in the village" with children who were in the same village ten years previously, often under worse economic conditions with far "inferior," far cheaper education systems, are very worrisome. Furthermore, students' achievement must be compared roughly with the minimum demands of the society in which they live.

---

*The New York Times, February 20, 1972, p. 55.

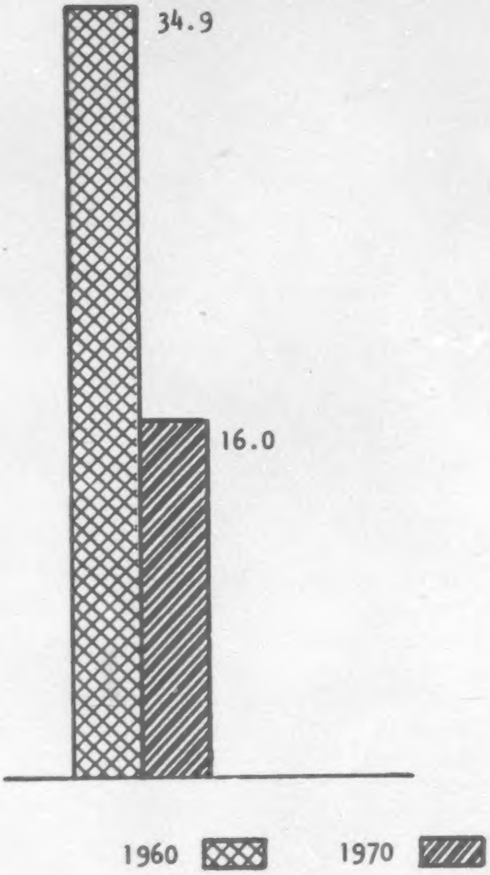
**Dr. Jerome Kagan, Harvard University, "The Poor Are Educable," The New York Times, January 16, 1974, p. 81.

This is not to say there are no problems in judging how effective our present schools have been, particularly past ninth grade, compared to schools of thirty-five or forty years ago. Many more students go through senior high school these days than in the past. More important, children are promoted through the grades who used to be kept back until they knew the subject matter.

---

*We have some evidence that a Massachusetts doctor's son of old was unlikely to be so ignorant, at least not in 1845. As mentioned earlier, an honors examination for eighth grade in 1845 Boston (an upper class child, "a doctor's son," was quite likely to find himself taking that exam in 1845) was given to a representative sample of eighth grade students in 1919. As evidenced, the 1845 pupils surpassed those of 1923 (see p. 30).

PERCENT OF COHORT KEPT BACK
ONE YEAR AND/OR DROPPED OUT
BY THE ELEVENTH GRADE



U.S. Bureau of the Census, *Statistical Abstract of the United States: 1973* (Wash.: G.P.O., 1973), p. 121

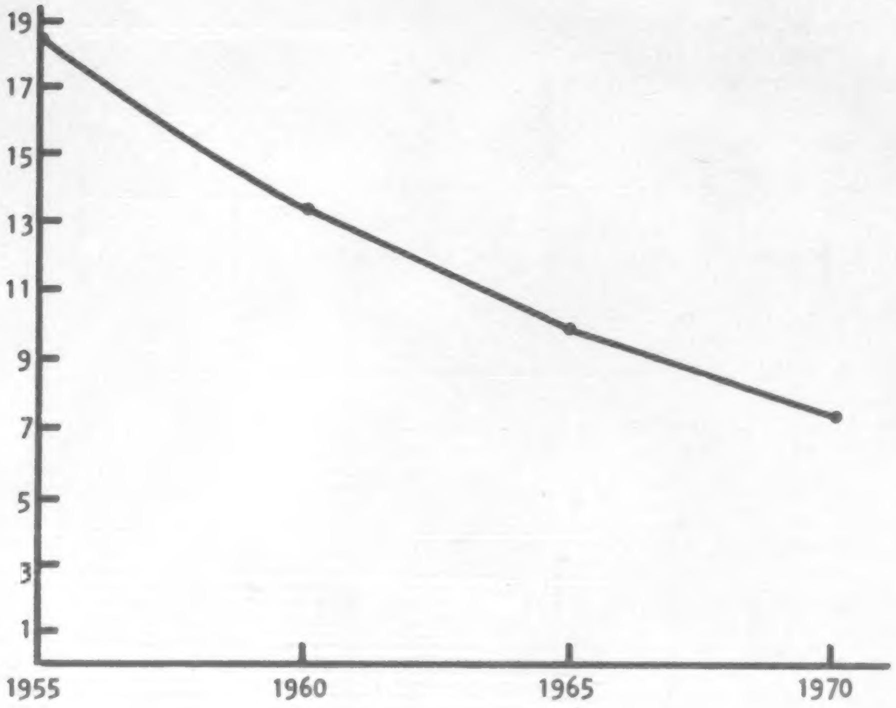
High schools these days often are actually judged on their "holding power," i.e., what percent of the children who entered ninth grade graduate with their cohort four years later. The smaller the dropout rate (and apparently even the retention rate), the better.* Under these conditions, the quality of the average student is bound to have fallen under any method of teaching. But eventually the students must pick up the upper grade skills or be poorer students; the SAT and Iowa Test scores seem to bear this out. Since almost half of all high school students now go on to college, the quality of the average college freshman is bound to have fallen too.

This dilemma of evaluating school effectiveness over time is not quite as difficult with pupils in elementary and junior high school, where for several decades by law they have had to remain in school until they were sixteen years old. Students are not held back in these grades any more either, so many an eighth grader of today may have only been equal to a sixth grade level at the same age in the old system, but we should be able to judge if he has the same basic knowledge of the fundamentals he normally would have had many years ago.

---

*The Fleischmann Report, v. I, pp. 33-37.

PERCENT OF COHORT KEPT BACK AT LEAST ONE YEAR
BY THE SIXTH GRADE



U.S. Bureau of the Census, Statistical Abstract of the United States: 1973 (Wash.: G.P.O., 1973), p. 121

This new promotion policy cannot, however, account for the drop in achievement scores since the mid-1960s, nor the degree of acceleration of drop in these scores. First of all, as the previous graph indicates, the easy promotion policy was well under way in the late 1950s and early 1960s, when average academic achievement was rising. Furthermore, since 1970 the pass-on rate has reached 92 percent for the sixth grade so this effect would have begun to flatten out (100 percent after all is the limit). Clearly other factors are at work here.

CHAPTER IV

A LONGITUDINAL STUDY OF MEAN IQ

The preceding data, which seem to imply an almost cyclical change in academic achievement characteristics over the decades (at least for the upper primary grades and high school), tempt one to consider the possibility of a changing national mean IQ. This is a difficult assumption to substantiate but there are data available which perhaps should be examined with the view to attempting to trace changes in mean IQ nationally, over time.

A. IQ Evidence from World War II to the Present

Paul J. Bracken

The primary source of information in the area of mental competence is the results of repeated mass testing programs. The most notable example of this is the testing performed by the military in their efforts to select potential recruits. For example, the U.S. Army first administered mental ability tests in World War I. They continued their testing in World War II and afterward. (Experts generally use levels of scores on these tests as indicative of IQ levels.) Although different tests were used for many of the administrations it is possible to equate the scores from different tests. This equating of scores allows a very long-term look at mental ability among the young adult male population of the United States. As with all studies that consider real data, caution must be used. Errors due to sampling, changes in test score equating, scoring variations and other factors too numerous to mention are all present. However, two facts make the analysis of the data worthwhile: the large sample sizes involved, and the importance of even crude estimates of national mental ability.

A comparison of ability levels of World War I and World War II groups was made possible by a readministration of the World War I Army Alpha Examination. A sample of 768 white enlisted draftees was chosen to be statistically representative of the entire 1943 draft.* This sample was given both the Army Alpha Examination and the World War II Army General Classification Test (A.G.C.T.). Both tests seemed to be measuring the same skills and functions since the correlation and coefficient between the results was .9. The results indicated a dramatic rise in mental ability when the scores on the Alpha were compared to the scores of a large group of white enlisted soliders of World War I. The World War I group, with a sample size of 48,102, obtained only a twenty-second percentile score in terms of the World War II group. The average World War II soldier would have placed at the eighty-third percentile in terms of the original Alpha group. (Note also that the 1943 group was probably much more representative of the nation than the 1917 sample. In 1917 only the "cream" of the Army was included among the 48,102 soldiers, since illiterates and those who did badly on the Alpha test originally were excluded from the sample.) It can be shown that both samples were representative of the underlying populations from which they were drawn.**

Some further results of Army testing are also available. Scores from sample groups taking the Armed Forces Qualification Test (A.F.Q.T.)

---

*Read D. Tuddenham, "Soldier Intelligence in World War I and II," American Psychologist 3 (1948): 54-56.

**Christopher Jencks et al., Inequality: A Reassessment of the Effect of Family and Schooling in America (New York: Basic Books, 1972); Robert M. Yerkes, ed., Psychological Examining in the United States Army, v. 15, Memoirs of the National Academy of Sciences, 1921.

in 1955, 1962 and 1970 can be equated to scores on the World War II A.G.C.T. Since the World War I scores can also be transformed into World War II categories, a stream of mental ability estimates for most of the twentieth century can be obtained. Using the following definitions it is possible to make comparisons of this ability for very large sample sizes.[*]

WORLD WAR II MENTAL CATEGORIES

Category I	93.3 - 100.0 percentile
Category II	69.1 - 93.3 percentile
Category III	30.9 - 69.1 percentile
Category IV	6.7 - 30.9 percentile
Category V	0.0 - 6.7 percentile

All numbers give percentages of soldiers falling in the respective baseline World War II category.

TWENTIETH CENTURY TRENDS IN MENTAL ABILITY BASED ON MILITARY TEST DATA

	World War I (1917-1918)	1941	1943	All World War II[*]	1955	1962	1970
Category I	1%	9%	6.4%	8.8%	6.9%	5.9%	3%
Category II	8	36.4	28.6	28.5	20	24	33
Category III	31	29.0	31.1	30.7	36	37	36
Category IV	50	17.0	28.5	26.2	23	28	20
Category V	10	8.6	5.4	5.8	14.1	5.1	4

[*] Walter V. Bingham, "Inequalities in Adult Capacity--From Military Data," Science 104 (1946): 147.

The above table shows the massive increases in mental ability between the World Wars. The results after World War II are based on smaller sample sizes. They tend to show a gradual increase since the 1955 testing.[*] Taking the midpoint of each category and multiplying it by the obtained percentages permits a crude estimate of the mean. The results for this yield the following:

---

[*] In fact, these test data probably represent one of the largest group estimates in psychometric history.

	1917	1941	1943	All World War II	1955	1962	1970
Mean score	31.8	55.4	51.1	51.2	44.6	49.5	55.5

While these must be considered as crude estimates, the implications are fascinating. Why did the tremendous growth of the pre-World War II era top out? It is difficult to suggest any explanations that can be backed up with data. Other sources suggest that industrialization, the introduction of radio broadcasts, improvements in nutrition, and mass education are all important factors in the pre-World War II gains. As to the post-war scores, where the numbers tested were much smaller, the draft was light, and where those tested included a high percentage of volunteers, it seems to be the case that the drop of 1955 may be a sampling anomaly. This could be caused by either the inherent variability of any sample (e.g., number of volunteers vs. number of draftees) or by certain features of the draft policies of the time. Deferments and the state of the economy would all be important factors in determining military accessions. Other estimates of mean A.F.Q.T. scores for the postwar era give:

1952:	52	1957:	53.3
1953:	52	1963:	53.1

Technical Research Note 12, "Successive AFQT Forms--Comparisons and Evaluations," U.S. Army Personnel Research Office, May 1963

---

[*] Army Research Institute data.

We do not know the sample sizes of these studies (each number given represents the results of a different individual study) or any other details, but these scores are much closer to the total World War II score and to the 1970 estimate. Furthermore, 1952 was a heavy manpower year for the armed forces, and assuming no defects in the study which produced the figure for that year, it would lead us to doubt the trough indicated by the previous 1955 and 1962 estimates and to assume they were probably biased below the true mean value. If this were the case, then the postwar mean scores would lie in the range 51-55 points. However, because of their large samples, the estimates for World War I and World War II are still valid.

In summary, there were large gains in mental ability between the World Wars as measured by army mental examinations. Other indicators of mental ability almost invariably show increases when similar populations are tested some years apart.* It is possible that the slope of this curve in IQ improvement was even steeper in some areas and/or in some years of this time span. (For example, children from Tennessee mountain areas were tested in 1930 and 1940. The 1940 results showed a gain of about .6 standard deviations.** Considering the time span involved, this is an even greater gain than that found in the military data.) The trend since the War, however, does not continue the large increases apparent in the previous era. Assuming that the trough apparently indicated by the initial set of A.F.Q.T. scores was an invalid indicator, there is also no significant evidence that mental ability of men of military age has dropped from the World War II mobilization base levels. In any event, the changes from year to year in the postwar Armed Forces Qualification Test scores are quite small compared to the changes in the prewar era.

---

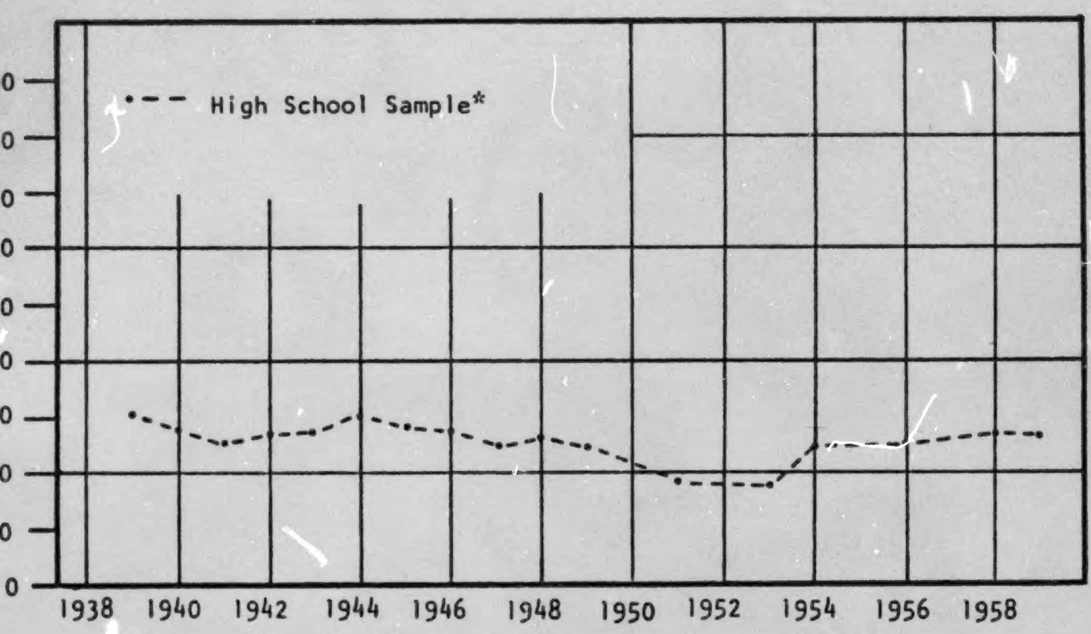
*There are theoretical reasons for this phenomenon but they are beyond the scope of the present discussion. The interested reader can consult Robert Cancro, Intelligence, Genetic and Environmental Influences (New York: Grune and Stratton, 1971).

**Lester R. Wheeler, "A Comparative Study of the Intelligence of East Tennessee Mountain Children," Journal of Educational Psychology 33 (1942): 321.

There is some narrow corollary evidence which supports the contention that there has been a rough plateau between the late 1930s and the 1950s and even some that indicates the same thing between the late 1930s and the 1960s, but this latter evidence might also imply the possibility of some temporary drops in aptitude (which may be roughly indicative over time of changes in IQ level) among high school seniors during the late 1940s and early 1950s. If so, this might indicate a possible trough in IQ of men of military age by the second half of the 1950s, since the average age of men entering the military in this time period was about 23.

Minnesota high school seniors show the following percentile pattern for mean college aptitude scores between 1939 and 1959.

PERCENTILE PATTERN FOR MINNESOTA HIGH SCHOOL SENIORS
MEAN COLLEGE APTITUDE SCORES, 1939-1959



*A comparison of percentiles corresponding to mean college aptitude test scores of high school graduates, 1938-1959. From 1938 to 1948 the test used was the A.C.E. Psychological Examination, 1937 college edition, given to seniors; from 1949 to 1953, the 1917 form of the same test, given to seniors; from 1954 to 1957, the 1952 form was used, given to juniors; and in 1958-1959 the Minnesota Scholastic Aptitude Test was used, given to juniors.

Ralph F. Berdie et al., Who Goes To College?: Comparison of Minnesota College Freshmen 1930-1960, Minnesota Studies in Student Personnel Work, No. 12 (Minneapolis: University of Minnesota Press, 1962), pp. 30-31

We have a less encouraging indication, however, from at least one school system for the years 1969 to 1973. These data reflect the IQ of a very large sample of pupils, about a quarter of a million twelfth graders tested each year and about a third of a million sixth graders, from a very large, cosmopolitan state, California. The statewide mean

IQ of twelfth and sixth graders decreased through four school years as follows:*

	Twelfth Graders	Sixth Graders
1969-1970	101.5	98.1
1970-1971	101.0	97.2
1971-1972	99.1	96.6
1972-1973	98.8	96.3

California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1974

Furthermore, these falling IQ scores for both grades track the achievement scores in both the California twelfth grade data and the Iowa Tests of Basic Skills data in that the drop is greater among the seventy-fifth percentile (the more intelligent) students than those in the twenty-fifth percentile.**

	Twelfth Grade		Sixth Grade	
	75th Percentile	25th Percentile	75th Percentile	25th Percentile
1969-1970	113.2	90.5	109.0	87.9
1970-1971	112.8	90.2	108.2	87.4
1971-1972	110.5	88.7	107.5	87.0
1972-1973	110.1	88.3	107.0	86.9

California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1974

---

*See the Appendix by Paul J. Bracken, pp. 3-7.

**Ibid.

B. Some Interpretations of IQ Data

There seems to be some reason to believe that California is not unique in this drop in IQ in recent years. Many other states, for example, Idaho, New Mexico, Ohio, West Virginia, list test results over recent years in such items as "abstract reasoning," "academic aptitude," "total ability." With the exception of West Virginia, where "total ability" held steady (with even some improvement in the eleventh grade) between the 1970-71 and 1973-74 school years, and New Mexico's first grade which increased its "mental ability" score and the eighth grade which held steady (the fifth grade fell) in "academic aptitude" between the 1971-72 and 1973-74 school years, all other states showed a decrease in such "ability" test results.* (As mentioned earlier, changing populations or shifts to private schools apparently do not solely account for these trends.)

If we assume these test results show mean IQ trends, we still hesitate to generalize from this significant sample of states, even when it includes our largest and one of our most diversified states (which clearly indicates its data are IQ test results), particularly when West Virginia data apparently contradict this trend. On the other hand, we have found so much similarity between states in trends in the academic achievement area that one also hesitates to ignore the possibility that in mean IQ we may once again be seeing a general trend reflected in statistics from several different types of IQ tests, and possibly IQ indicative tests, from various states, including our largest. West Virginia's "total ability" scores may be somewhat atypical, as apparently are its almost stable academic achievement scores. In any event, the possibility of the mean IQ going down in recent years in the long list of states with extended periods of declining academic achievement scores should not be ignored.

---

*See the Appendix by Paul J. Bracken.

If one were forced to plot these results on a graph, the military data would seem to indicate a likely band in mental ability which would show a sharp upward slope for the population of military age between World Wars I and II. (The east Tennessee data could suggest there is even the possibility that this curve could be somewhat convex with the steepest slope in the 1930s.) Then the band would plateau with perhaps a less dramatic rise in the late 1960s, while some Armed Forces Qualification Test Data,* Navy Trainability data,** and the Minnesota high school senior data might suggest a possible dip in the mid-1950s when these men entered the service.

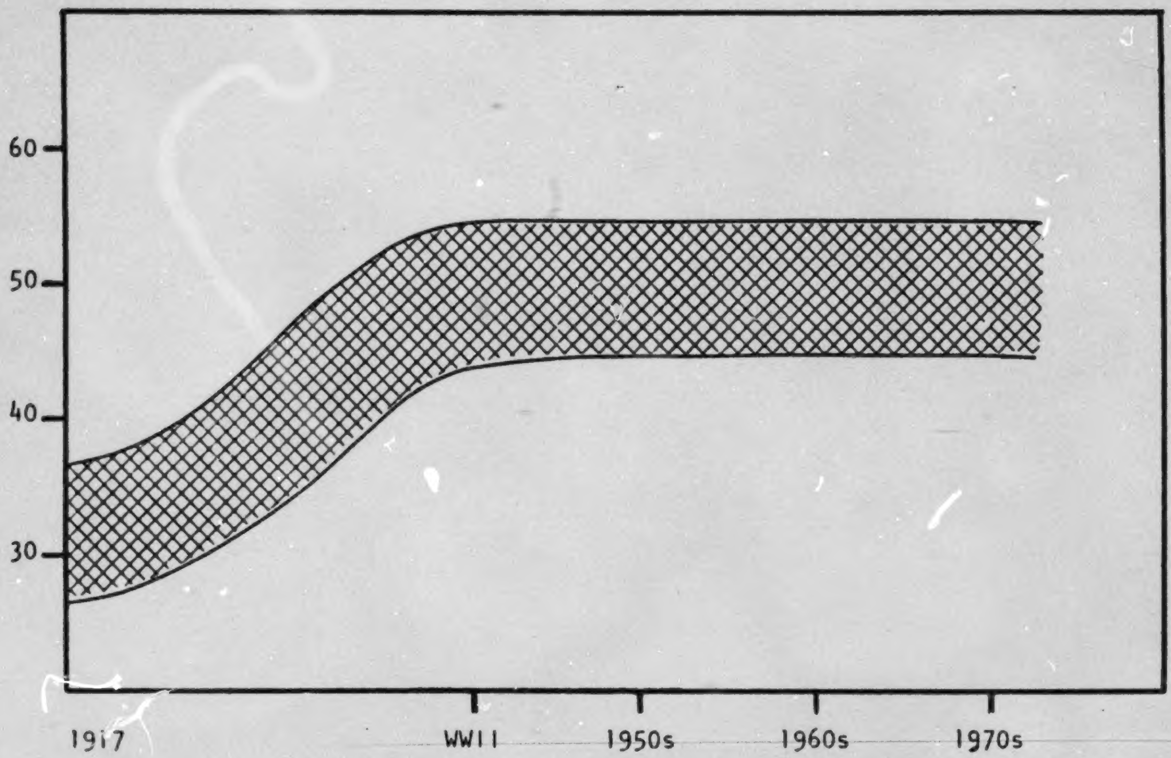
Our speculative national mean IQ curve for adults of military age, therefore, may look somewhat as follows:

---

*See p. 91 for the drop in mean A.F.Q.T. score and Categories I and II (the brightest men) in 1955. Some data which show no such trough in the mid-1950s A.F.Q.T. scores can be found on p. 90.

**See p. 1-2-5 of The Report of the President's Commission on an All Volunteer Army for a drop in the percentage of "Trainables" (total Categories I, II and Upper III in Navy recruits in 1955 and 1956.

MENTAL COMPETENCE OF MEN OF MILITARY AGE



U.S. Army, Army Research Institute, AFQT test data, World Wars I and II, 1955, 1962 and 1970; also based on data from Read D. Tuddenham, "Soldier Intelligence in World Wars I and II," The American Psychologist 3 (1948): 54-55

One is even more reluctant to speculate about reasons for apparent changes in mental ability, although, as indicated earlier, many have been made. For example, Dr. Tuddenham, who first brought the impressive change between World Wars I and II to the attention of scholars, felt it was the direct result of more and better primary and secondary education enjoyed by World War II draftees.* For longer-term trends, others speculate on genetics and even home environmental effects. We do not claim to know much about causes of changes in IQ, particularly short-term changes. Cultural bias and other issues may make a difference, but they probably cannot fully explain changed results of repeated administrations of the same IQ test among the same cultural group. We do not necessarily know, in each case, if there is cause and effect between IQ and academic achievement, and if so which is which. There is no conclusive evidence that the apparent drop in academic achievement in primary and secondary schools in the late forties was reflected by a drop in the mean IQ of military men in the 1950s, although, as we have seen, some data imply that some drop in IQ may have occurred among them in the mid-1950s. In general one feels that the post-World War II data cited are probably too sketchy and crude to reflect anything more than a band of IQ level over the years.

---

*Tuddenham, "Soldier Intelligence," p. 55.

In any event, with the data at hand, it is difficult, except perhaps in the 1930s case, to associate long-term trends in academic achievement scores with trends in a changing mean IQ of men of military age. One could perhaps make the argument that IQ is only raised by superior education; that it works on a ratchet principle, the thrust of education can drive it up but when this force is removed, IQ remains suspended at that point until another spurt in education peaks to a new high and boosts it again. The drop in academic achievement in the late 1940s may have indicated that IQ can remain relatively high while achievement falls. The drop in the California mean IQ and perhaps in other states as well, may belie this principle, however.

A likely speculation from the preceding data may be that: (a) the IQ level of the country's young adults, if it changed at all between

1943 and the late 1960s, varied to a much less extent than between 1917 and World War II; (b) over all high school student IQ probably did not fluctuate very significantly between the mid-1930s and early 1960s; (c) young adult IQ may have risen somewhat by 1970 and high school pupil IQ by the mid-1960s; (d) the high school pupil IQ may have begun to fall off somewhat in the 1970s; but (e) it would be difficult to prove that the drop in achievement in the 1940s (when there apparently was no great drop in IQ) was due to IQ deficiencies; and (f) there are insufficient data to substantiate or disprove the premise that the current achievement slump which began in the mid-1960s was triggered by an IQ slump. (All upper grades seem to drop in achievement together, while lower grades maintain their standing. A cohort of less gifted children moving through the system should cause the lower grades to drop first and then the upper grades to fall one at a time with the bottom upper grade--say fifth grade--falling first, then the next highest, etc. In fact, as we have seen, cohorts moving through the system go up or down in achievement from one year to the next, apparently according to the achievement tracks of the grades they enter, not their inherent IQs, etc.); and (g) the level of students' IQ has probably been adequate at all times to cope with learning the fundamentals in primary and many in secondary schools.

What we are asking these children to learn is normally not that demanding--reading, basic mathematics, etc. Even the majority of pupils in the twenty-fifth percentile IQ bracket (except perhaps some of the handicapped) apparently should be able to handle most of the traditional demands of primary school and much of the old high school material--and almost all of the mandatory high school material as we now know it in many of our large city school systems.

Above and beyond these speculations, however, is the question of why IQ is falling in states where it seems likely it is, and why the drop is more severe in the higher percentile brackets, as it is in California and seems to be in New Mexico in the fifth grade. Of course, if the many states with records of continuing drop in achievement in the upper grades should turn out to be having the same experience as California, that is, if a national drop in IQ is being experienced, particularly if it is among the higher percentiles as is the achievement drop, the question of why this is occurring becomes very important. The home environment of the ninetieth percentile achievement children (where the largest drop in national ITBS scores occurred in 1964-1971), and the seventy-fifth percentile IQ children (where the largest drop in California IQ scores occurred in 1969-1970 to 1972-1973), is normally that thought to be ideal by educators. Their parents are most likely to have high IQs, college degrees, interest in education, etc. The schools these children are most likely to attend are in the affluent suburbs, small cities and better parts of large cities, normally considered the best endowed by educators. Such data could raise some very important questions as to why these children should be dropping so rapidly in achievement, and perhaps also in IQ. Again, what goes on inside those schools must be scrutinized to determine what might be the most important variables affecting these trends.

CHAPTER V

THE EDUCATIONAL PROCESS

A. A Longitudinal Study

Apparently the need for longitudinal studies is one understood by educators and educational administrators. One can easily see the value of such studies for planning purposes. One only hopes, however, that the greatest "longitudinal study" of them all is not overlooked. That study, of course, is the record of schooling in America in the 200 years of its existence. One can get the disturbing impression that this great longitudinal study may be receiving insufficient attention, despite the fact that the dramatic changes in the fundamental process which are going on today may benefit from examining even such a broad study as that. I say this despite or perhaps because of the fact that there have been vast changes in the socioeconomic, ethnic, physical and political backgrounds of the children involved.

In the early days,

> "...the importance of acquainting young people with the nature and operations of our political institutions and, as the guardians of the status quo saw it, with the principles of both private and public morality without which a stable society cannot endure"*

was fully accepted by those in charge of our educational processes. When large groups of children from rural areas (or with parents from rural areas) both here and in Europe, vast numbers knowing little or no English, entered school,** they had to be taught the standards of behavior and requirements of society, the country, and the city in which they now resided.

---

*V. T. Thayer and Martin Levit, The Role of the School in American Society (New York: Dodd, Mead), p. 25. Used by permission of Dodd, Mead & Company, Inc.

**See "Parents, the Home Environment and Education."

> "Civics" no longer concerned itself with matters exclusively political, but undertook as well to acquaint young people with the agencies and institutions and the problems of the community. Thus, "community civics" came into being. Similarly, in the elementary school, particularly the need for health education was obvious, education that would safeguard the health of children even when this involved correcting the erroneous practices and ideas of parents.*

Because of the increase in adult female and child labor, schools began to teach home economics and shop.** In this time period, however, the schools probably still reflected to some degree the attitude "that the child should fit himself to the curriculum, not the curriculum to the child!"*** at least in the primary grades. For those children who went to junior high school, "...genetic psychology was emphasizing the dynamic and instinctive potentialities of the young person, with the clear implication that nature was to be followed..." in contrast to "...life outside the school, in home and community, in business and industry, which stressed the importance of education for adjustment, one that would give specific and detailed attention to the formation of desirable habits and skills and techniques."**** Confronted with this necessity of choice, educators turned to a psychology that would further education for adjustment.*****

---

*Thayer and Levit, The Role of the School, p. 167. Used by permission of Dodd, Mead & Company, Inc.

**Ibid.

***Ibid., p. 123.

****Ibid., p. 167.

*****Ibid.

Obviously, the "principles of both private and public morality" and the "desirable habits" taught in the schools in those days reflected the value system of the American society. This was basically an Anglo-Saxon society, with a value system adjusted generally to that societal idea in a country which, compared to any other great nation and society in history, provided more opportunity for more people than ever before. It apparently was understood that to take advantage of these opportunities, one would have largely to "adjust" to the society which prevailed in this land. And by and large educators apparently felt that the benefits to be accrued far outweighed the inconveniences of adjustment. Obviously, one of the places for immigrant children to learn about the value systems and the strange society that existed in their newly adopted country was in the schools. In the case of these children the schools did, indeed, seem to have a "strong independent effect,"* which apparently did much to make up for the "societal deprivation" they experienced in the truly foreign atmosphere of their homes and neighborhoods.

Of particular interest to a study of our public school system is the vast influx of immigrants between 1890 and 1910. By the late 1800s the public school system was well established. The "hump" of increased student population suddenly injected into the system exceeded that of the 1930s or the 1960s and the percentage of underprivileged among them probably exceeded those of the Great Depression years of the 1930s.

This school system, however, provided education for these children of peasant immigrant parents who not only could not speak English but could not read or write at all.[*] Even if parents could read, they often read a language that used alphabets or symbols which made it impossible, or at least very difficult, to help their children, e.g., Chinese, Arabic, Hebrew, Yiddish,[**] and to a lesser extent, Russian, Greek and German. Furthermore, this educational process functioned throughout wars, riots, rebellions, panics and extended depressions, the likes of which would be hard to imagine today.

---

*See p. 135.

The author attended grade and high schools in the anthracite coal regions of Northeastern Pennsylvania, during the Great Depression of the 1930s. Even the "dumbest" kids in the vast classes of second-and third-generation immigrant pupils from neighborhoods sunk in poverty could read, knew the multiplication tables, could handle straightforward arithmetic problems, etc. (They had much trouble with the tougher "thought" problems, etc., but one suspects that such problems would be even more difficult for the "slow learners" among our underprivileged children in our schools today.) Both parochial and public grade schools were sometimes quite unpleasant places for a child to spend his time, and one is glad that some aspects have changed, but they had their good aspects, e.g., "remedial reading classes" were unknown in those days because everyone could read adequately by the fourth grade. Furthermore, the immigrant and second-generation parents of the native pupils, who had themselves attended these schools for a few years under even worse conditions in the 1890s, could all read, write and cipher.

---

[*] See "Parents, the Home Environment and Education."

[**] A German dialect written in Hebrew characters.

After deploring the twelve-year-old boys working in coal breakers, a student of the American social scene wrote of the primary school system in the hard coal fields of Eastern Pennsylvania in 1899, a period of a prolonged and rather severe recession in the area,

> ...most serious of all was the appalling number of little children thrust upon the care of a single teacher. It seemed to me that one of the primary teachers had nearly seventy in her care, and most of these knew hardly a word of English when they came to her....*

Later, when he could not find his way and was surrounded by "uncouth and alien faces" of recent adult immigrants (Hungarians and Italians), a product of this school system, "a neatly dressed young married woman," came to this author's assistance. "I turned toward her to ask my question. She answered it pleasantly in the best of English...." Taken aback, our visitor asked how long she had been in America:

> She said that she had come over a child of seven and had lived here ever since, getting her education in the district schools that had seemed to me so inadequate. Apparently her opportunities had been in no way exceptional save her American education, yet in manner as well as face, she seemed a different order from the women about her.**

Big city schools hit by the influx of immigrants in this time period had the same problems "with more than 80 children per teacher in the primary grades" in New York City in the early 1890s. "Many buildings were dark, dank and decrepit; in some, the only play space was a fetid, rat-ridden basement" and "thousands of children were denied admission because of lack of accommodations" of even this low standard.*** In 1893 an observer of big city schools was also shocked by conditions but did not like the achievement either. He wrote of a "typical New York primary school":

---

*Charles B. Spahr, America's Working People (New York: Longmans, Green and Company, 1899), pp. 137 and 138.

**Ibid., p. 141.

***The New York Times, January 16, 1974, p. 59.

> Its characteristic feature lies in the severity of its discipline...of enforced silence, immobility and mental passivity. The primary reading is, as a rule, so poor that the children are scarcely able to recognize new words at sight at the end of the second year. Even the third year reading is miserable.

Such harsh discipline apparently was not universal. He later found in Philadelphia that "the curriculum was narrow and the teachers were unprepared" but also that, "...the children at times amused themselves by walking around the room, or by talking so loudly...that the teacher could scarcely communicate with the other pupils...." The reading was "very bad," the arithmetic "not very much better," and not much else was "attempted."*

By 1900 things were still felt to be unsatisfactory. "Despite its compulsory school law, New York City estimated in 1900 that 40,000 children of school age were not enrolled in school." The total enrollment in elementary schools was 500,000 and "there were not enough truant officers to round up the truants and put them in school."** This represents a nonenrollment and/or truancy rate of 8 percent. (Today about 16.5 percent of New York City's enrolled students are absent on any given day because of illness, truancy, etc.***)

---

*Peter Binzen, Whitetown, U.S.A. (New York: Random House, 1970), p. 45.

**Ibid., p.44.

***Statistics of Public Elementary and Secondary Day Schools: Fall 1972, p. 17, table 4.

Nonetheless, some observers felt the students' behavior was exemplary and that these schools too seemed to be effective. An Evening Post (New York) article of January 10, 1903 states:

> Visitors who are taken to lowly primary classes first and then immediately afterwards to the highest grammar grades are astonished at the difference. While in the lowest grades a glance shows how necessary is the eternal vigilance of the teacher, in the higher grades one can see the effect of training and habit.

The article noted that outside the school pupils were exposed to foreign tongues and that these

> ...often join with the latest slang to form the ordinary language of the youngest pupils. Upstairs in the classrooms, all day long, the teachers are struggling to overcome these habits of expression, and, considering that the child hears English only five hours out of the twenty-four, the results at the end of the fifth and sixth years of school life are wonderful.

Furthermore, many of the children

> whose mothers and fathers possibly went out daily to work as the youngsters were getting up for the day, acquired their habits through compulsion and insistence [of the teachers].*

According to a New York Tribune article of September 16, 1906, one New York school had 5,000 students for 96 classrooms. Entire classes of children who couldn't speak a word of English were taught by teachers who used only English, but upper classmen had high ambitions for later life.** By the 1908-1909 school year, however, the pupil-teacher ratio for New York had fallen to 36.9 to one, which meant an average class size somewhat larger than that but less than 40. In Philadelphia the ratio was 36.5; in Chicago .*

---

*Allon Schoener, ed., Portal to America: The Lower East Side 1870-1925 (New York: Holt, Rinehart and Winston, 1967), pp. 127-128.

**Ibid., pp. 129-130.

These schools were not only inadequate in terms of what the contemporary observers, quoted earlier, thought was necessary in terms of staff members, books (there were no libraries), floor space, etc., but there was, according to a modern scholar, an utter lack of respect for or identity with, the students on the part of most teachers.

> From the desk the teacher looked down, a challenge they dared not meet. It was foolhardy of course to question her rightness. What an arsenal was at her command to destroy them! The steel-edged ruler across the knuckles was the least of her weapons. Casually she could twist the knife of ridicule in the soreness of their sensibilities; there was so much in their accent, appearance, and manners that was open to mockery. Without effort she could make them doubt themselves; the contrast of positions was too great....There was visible evidence of her correctness in her speech and in her bearing, in her dress, and in the frequent intimations of the quality of her upbringing.**

In thirty cities examined during the 1908-1909 school year, when schools in our cities were crammed with lately arrived Italian, Polish, Lithuanian, Russian, etc., immigrant families, the makeup of the teaching staff was as follows:

---

*U.S. Immigration Commission. Reports. V. : (S. Doc. No. , Cong., sess.) (Wash.: G.P.O., 1911), p. .

**Oscar Handlin, The Uprooted: The Epic Story of the Great Migrations that Made the American People (Boston: Little, Brown, 1951), pp. 220-221.

Native-born White	49.8%
Native-born Negro	1.5
English	4.7
Irish	17.8
Scotch	2.3
German	8.0
Other	16.0

U.S. Immigration Commission. Reports. V. 29: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), p. 137

A 1909 twelve-city survey showed that 52.8 percent of students in the sample who were children with fathers of non-English-speaking races, lived in homes where English was not spoken.* In 1909, 57.8 percent of the pupils in thirty-seven of our largest cities were immigrants or the children of immigrants. In New York City such children made up 71.5 percent of the pupil population, in Chicago 67.3 percent, and in Boston 63.5 percent.** As we have seen, even when the teachers were "foreign born" they were not of the "lower class," later East European and Italian immigrant stock, but primarily of "superior" English-speaking (including Irish) and earlier German immigrant stock. A comparison of national origins (place of father's birth) of pupils and teachers in some major cities in the 1908-1909 school year is interesting.

---

*U.S. Immigration Commission. Reports. V. 29: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), p. 97.

**Binzen, Whitetown, U.S.A., p. 44.

COMPARISON OF 4 LARGE CITIES: RACIAL COMPOSITION RANKINGS OF STUDENTS AND TEACHERS (PUBLIC SCHOOLS)

	Students		Teachers	
	First Rank	Second Rank	First Rank	Second Rank
Baltimore	Hebrew 13.5%	German 8.7%	German 7.5%	Irish 5.9%
Boston	Irish 16.5	Hebrew 15.7	Irish 23.2	Canadian 4.5
New York City	Hebrew 33.6	German 11.9	Irish 20.7	German 8.0
Philadelphia	Hebrew 16.9	German 9.4	Irish 10.1	Scotch-Irish 5.7

U.S. Immigration Commission. Reports. V. 29: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), pp. 21 and 140

The following tables give details for four large immigrant cities.

NEW YORK CITY RACIAL COMPOSITION, K-12

	Students	Teachers
Native-born White	27.4%	44.6%
Native-born Negro	1.1	.3
English	2.3	4.5
German	11.9	8.0
Greek	.1	--
Hebrew German	3.8	3.7
Hebrew Polish	2.8	*
Hebrew Russian	19.2	3.7
Irish	5.1	20.7
Italian North	3.1	--
Italian South	7.4	--
Swedish	1.2	.4

U.S. Immigration Commission. Reports. V. 32: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), p. 615

CHICAGO RACIAL COMPOSITION, K-12

	Students	Teachers
Native-born White	31.0%	40.0%
Native-born Negro and Indian	1.7	.3 (exclusive of Indian)
Bohemian and Moravian	6.9	.7
Dutch	1.1	.5
English	2.7	5.6
French	.4	.70
German	16.2	10.4
Hebrew German	1.9	1.4
Hebrew Polish	.9	.2
Hebrew Roumanian	.4	n/a
Hebrew Russian	6.8	.2
Irish	4.5	25.2
Italian North	1.1	less than .05
Italian South	3.2	less than .05
Norwegian	2.7	1.7
Polish	3.2	less than .05
Swedish	7.5	2.4

U.S. Immigration Commission. *Reports*. V. 30: *The Children of Immigrants in Schools*. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), pp. 546 and 678

PHILADELPHIA RACIAL COMPOSITION, K-12

	Students	Teachers
Native-born White	50.6%	65.4%
Native-born Negro and Indian	5.0	2.5 (exclusive of Indian)
Danish	.2	.1
English	4.4	5.3
French	.4	.4
German	9.4	4.0
Hebrew German	1.9	.8
Hebrew Russian	12.3	.4
Irish	4.4	10.4
Italian North	1.1	.3
Italian South	3.5	.1
Scotch	1.2	2.3

U.S. Immigration Commission. *Reports*. V. 29: *The Children of Immigrants in Schools*. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), pp. 21 and 140

BOSTON RACIAL COMPOSITION, K-12

	Students	Teachers
Native-born White	34.9%	58.3%
Native-born Negro and Indian	1.6	.2 (exclusive of Indian)
Canadian (non-French)	7.7	6.3
English	4.1	4.0
French	.3	.1
German	3.0	1.9
Hebrew German	1.1	.5
Hebrew Polish	1.1	.3
Hebrew Russian	12.4	n/a
Irish	16.5	23.8
Italian North	2.2	.2
Italian South	5.9	.1
Scotch	1.8	3.1
Swedish	1.9	.4
Syrian	.3	0.0

U.S. Immigration Commission. Reports. V. 29: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), pp. 178 and 266

Nor do the conditions in the smaller cities in the hinterland seem to have been significantly different where large groups of recent immigrants existed. In Shenandoa, Pennsylvania in the anthracite coal mining region the makeup of the pupil and teacher population was as follows:

Father's General Nativity	Teachers	Pupils
Native-born, White	29.5%	32.9%
Foreign-born		
Lithuanian	2.0	20.3
Polish	1.0	17.7
Irish	56.8	19.1
All others	10.2	

U.S. Immigration Commission. Reports. V. 33: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), pp. 477 and 479

The later immigrants' children were obviously vastly underrepresented on teaching staffs. These were teachers who by modern standards very likely would have been considered alien to the majority of pupils in many core city and industrial area schools.

Nonetheless, though specific data such as modern scholastic achievement scores are rare for these years, one gets the impression that these students did learn to read and write a new language, along with learning fundamental grammar, mathematics, geography, civics and history--American history. (In Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, p. 32, we have noted some comparative data on reading ability from the second through eighth grades in St. Louis fo 1916 and 1938--itself a period of high achievement--and in all cases the 1916 students were superior, except for third graders, who were equal.) One should note that even the harshest critics of schools in the depths of

New York slums in 1893 (with eighty children to a class) obviously had considerable expectation of the wretchedly deprived foreign born and children of the foreign born in these institutions. They complained when these expectations were not realized. The critic cited earlier who condemned these schools stated that second graders "are scarcely able to recognize new words at sight" and that "even the third year reading is miserable." (Author's emphasis.) He apparently had no criticism for fourth and fifth grade reading, and one feels that today critics of our vastly more expensive, relatively uncrowded core city schools might often expect less from second and third graders.

What general hard data there are seem to substantiate the impression that the children of immigrants were being educated. The World War I achievement levels of foreign-born draftees who had completed substantial amounts of schooling in America, cited earlier, seem to substantiate this, but there is other evidence. For example, according to the Census Bureau, illiteracy among native-born whites dropped from 6.2 percent in 1890 to 1.6 percent in 1930, when out of a native-born white population of 96.2 million, 25.9 million were children of at least one foreign-born parent.* Furthermore, they and their children adapted to this unique culture and as a whole within two generations made the American dream come true.

In 1909 of the major immigrant groups of 30 cities studied, those with the most pupils "retarded" (more than two years below the grade in which they should be enrolled, e.g., 6 years old, first grade) were the Italians, Poles and Russians (almost entirely Russian Jews).

---

*U.S. Bureau of Census, Historical Statistics of the United States: Colonial Times to 1957 (Wash.: G.P.O., 1960), pp. 9 and 214.

GRADE ENTERED BY PUPILS 8 YEARS OF AGE OR OVER*

	Percent Who Entered:			Percent Retarded Who Entered:	
General Nativity and Race of Pupil's Father	First Grade	Second Grade	Third Grade or Above	First Grade	Second Grade or Above
Native-born:					
White (primary grades)	98.2	1.3	0.5	33.6	49.1
White (grammar grades and high school)	93.0	3.0	3.9	24.3	33.0
Total white	95.7	2.1	2.2	27.9	36.1
Negro	96.2	3.1	.7	66.2	70.8
Indian	90.0	6.7	3.3	54.5	**
Total native-born	95.7	2.2	2.1	30.1	37.9
Foreign-born:					
English-speaking races	92.3	3.1	4.6	25.8	38.0
Non-English-speaking races	94.5	2.5	3.0	41.4	64.7
Total foreign-born	94.1	2.6	3.3	38.6	58.6
Grand Total	94.7	2.5	2.8	35.3	52.4
Foreign-born pupils				60.7	64.0
PRINCIPAL FOREIGN RACES					
English-speaking races:					
Canadian (other than French)	94.7	2.5	2.8	24.3	43.6
English	92.5	3.4	4.1	24.9	33.2
Irish	87.4	3.6	9.1	27.0	35.9
Scotch	88.4	5.3	6.3	28.3	45.9
Welsh	95.1	1.2	3.7	33.3	**
Non-English-speaking races:					
Bohemian and Moravian	96.7	1.9	1.4	34.6	54.7
Canadian, French	84.7	4.0	11.3	40.4	75.7
Dutch	78.2	5.5	16.2	11.9	23.9
German	94.8	2.1	3.1	31.0	60.7
Hebrew, German	97.7	1.1	1.1	36.3	**
Hebrew, Polish	95.1	2.0	2.9	64.7	**
Hebrew, Roumanian	95.0	3.3	1.7	50.5	**
Hebrew, Russian	96.2	2.4	1.4	40.4	55.3
Italian, North	93.6	3.7	2.7	51.3	51.1
Italian, South	96.4	2.5	1.2	62.9	76.9
Italian (not specified)	95.6	2.8	1.6	55.4	73.9
Lithuanian	96.2	1.6	2.2	45.0	**
Magyar	91.5	4.4	4.1	55.0	76.0
Polish	82.0	4.6	13.4	51.1	80.1
Portuguese	97.8	1.5	.7	45.2	53.8
Ruthenian	100.0	--	--	44.1	--
Slovak	90.8	3.9	5.3	53.4	62.5
Swedish	98.1	1.7	.2	15.3	9.7

*Data refer to grade entered in public school; kindergarten excluded.

**Not computed due to small number.

U.S. Immigration Commission. Reports. V. 29: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), pp. 69 and 70

A glance at the following charts indicates part of the reason many of these students were "retarded" when they entered school.

PUPILS' AGES AT TIME OF ENTERING PUBLIC SCHOOL IN THE UNITED STATES BY GENERAL NATIVITY AND RACE OF PUPIL'S FATHER*

General Nativity and Race of Pupil's Father	Total Reporting Complete Data	Number						Percent					
		5 Years or Under	6 Years	7 Years	8 Years	9 Years	10 Years or Over	5 Years or Under	6 Years	7 Years	8 Years	9 Years	10 Years or Over
Native-born:													
White (primary grades)	11,162	3,449	6,052	1,295	256	61	49	30.9	54.2	11.6	2.3	0.5	0.4
White (grammar grades and high school)	10,407	2,956	4,979	1,700	443	83	246	28.4	47.8	16.3	4.3	.8	2.4
Total White	21,569	6,405	11,031	2,995	699	144	295	29.7	51.1	13.9	3.2	.7	1.4
Negro	1,268	206	673	230	102	36	21	16.2	53.1	18.1	8.0	2.8	1.7
Indian	30	7	14	4	3	1	1	23.3	46.7	13.3	10.0	3.3	3.3
Total native-born	22,867	6,618	11,718	3,229	804	181	317	28.9	51.2	14.1	3.5	.8	1.4
Foreign-born:													
English-speaking races	6,728	2,748	2,599	852	226	84	219	40.8	38.6	12.7	3.4	1.2	3.3
Non-English-speaking races	31,140	6,424	15,140	5,104	1,806	818	1,848	20.6	48.6	16.4	5.8	2.6	5.9
Total foreign-born	37,868	9,172	17,739	5,956	2,032	902	2,067	24.2	46.8	15.7	5.4	2.4	5.5
Grand Total	60,735	15,790	29,457	9,185	2,836	1,083	2,384	26.0	48.5	15.1	4.7	1.8	3.9
Foreign-born pupils	8,510	1,065	2,748	1,637	1,025	642	1,393	12.5	32.3	19.2	12.0	7.5	16.4
PRINCIPAL FOREIGN RACES													
English-speaking races:													
Canadian (other than French)	1,807	717	697	282	58	12	41	39.7	38.6	15.6	3.2	.7	2.3
English	2,714	1,236	1,000	283	83	43	69	45.5	36.8	10.4	3.1	1.6	2.5
Irish	1,187	499	409	136	45	19	79	42.0	34.5	11.5	3.8	1.6	6.7
Scotch	321	137	94	48	19	6	17	42.7	29.3	15.0	5.9	1.9	5.3
Welsh	83	--	70	8	2	1	2	.0	84.3	9.6	2.4	1.2	2.4
Non-English-speaking races:													
Bohemian and Moravian	1,614	232	1,047	207	53	25	50	14.4	64.9	12.8	3.3	1.5	3.1
Canadian, French	1,255	534	337	154	62	20	148	42.5	26.9	12.3	4.9	1.6	11.8
Dutch	308	12	186	34	23	19	34	3.9	60.4	11.0	7.5	6.2	11.0
German	5,136	826	3,104	797	186	59	164	16.1	60.4	15.5	3.6	1.1	3.2
Hebrew, German	264	54	134	52	14	2	8	20.5	50.8	19.7	5.3	.8	3.0
Hebrew, Polish	209	29	99	33	18	9	21	13.9	47.4	15.8	8.6	4.3	10.0
Hebrew, Roumanian	300	49	125	60	31	8	27	16.3	41.7	20.0	10.3	2.7	9.0
Hebrew, Russian	7,263	1,534	3,308	1,156	481	256	528	21.1	45.5	15.9	6.6	3.5	7.3
Italian, North	741	138	345	126	56	33	43	18.6	46.6	17.0	7.6	4.5	5.8
Italian, South	4,062	621	1,950	823	338	132	198	15.3	48.0	20.3	8.3	3.2	4.9
Italian (not specified)	1,029	175	501	187	66	34	66	17.0	48.7	18.2	6.4	3.3	6.4
Lithuanian	185	40	82	39	15	4	5	21.6	44.3	21.1	8.1	2.2	2.7
Magyar	312	20	148	63	26	20	35	6.4	47.4	20.2	8.3	6.4	11.2
Polish	1,609	351	514	302	138	64	240	21.8	31.9	18.8	8.6	4.0	14.9
Portuguese	1,835	828	542	245	105	40	75	45.1	29.5	13.4	5.7	2.2	4.1
Ruthenian	81	2	51	19	7	1	1	2.5	63.0	23.5	8.6	1.2	1.2
Slovak	353	13	216	62	19	10	28	3.7	61.2	19.0	5.4	2.8	7.9
Swedish	1,647	342	1,029	235	27	9	5	20.8	62.5	14.3	1.6	.5	.3

*Data refer to age at entering grades excluding kindergarten.

U.S. Immigration Commission. Reports. V. 29: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), p. 61.

Obviously the foreign-born pupils, particularly those who had never been inside a school in their native land, who entered the country "over age in grade," would be the hardest hit. A pupil who did not know English would almost have to start in first or second grade even if he were 10 years old. Those few who risked starting in the higher grades apparently did worse than those starting in the lower grades.

GRADE ENTERED BY FOREIGN-BORN PUPILS 8 YEARS OF AGE OR OVER WITH RESPECT TO RETARDATION, BY RACE OF PUPIL'S FATHER*

Race of Pupil's Father	Pupils Who Entered First Grade			Pupils Who Entered Second Grade or Above		
	Number Reporting Complete Data	Retarded		Number Reporting Complete Data	Retarded	
		Number	Percent		Number	Percent
English-speaking races:						
Canadian (other than French)	48	17	35.4	27	12	44.4
English	188	48	25.5	111	36	32.4
Irish	1	--	**	--	--	--
Non-English-speaking races:						
Bohemian and Moravian	160	85	53.1	23	15	65.2
Canadian, French	55	38	69.1	37	36	97.3
Dutch	18	3	**	20	9	45.0
German	157	77	49.0	29	20	69.0
Hebrew, Polish	42	33	78.6	10	9	**
Hebrew, Roumanian	67	47	70.1	6	5	**
Hebrew, Russian	1,994	1,177	59.0	203	128	63.1
Italian, North	109	84	77.1	10	9	**
Italian, South	929	713	76.7	55	47	85.5
Italian (not specified)	211	151	71.6	20	19	95.0
Magyar	81	56	69.1	14	10	**
Polish	37	26	70.3	25	22	88.0
Portuguese	341	242	71.0	15	13	**
Ruthenian	4	4	**	--	--	--
Slovak	28	18	64.3	6	5	**
Swedish	1	--	**	--	--	--
Total***	5,674	3,444	60.7	933	597	64.0

*Data refer to grade entered in public school; kindergarten excluded.

**Not computed due to small number.

***Including pupils of races not enumerated above and also pupils of above-enumerated races in cities where less than 50 pupils (native-born and foreign-born) of the races were reported.

U.S. Immigration Commission. Reports. V. 29: The Children of Immigrants in Schools (S. Doc. No. 749, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), p. 71

Whatever the reasons, however, the large identifiable groups of children of immigrants, the children of Italians, Poles and Russians, were on the bottom of the heap. Two generations later, the 25- to 34-year-old descendants of these groups (those who left high school in or prior to the early 1960s, before almost automatic promotion and graduation had become quite so prevalent [see pp. 83-87]) showed themselves to be above the median educational level of that age group of the population as a whole for that year (between 12.5 and 12.6 years of schooling*). Some were also above earlier immigrant groups and the Russian Jews surpassed all groups.

YEARS OF SCHOOL COMPLETED BY PERSONS 25 TO 34 YEARS OF AGE
BY ETHNIC ORIGIN, MARCH 1971

		Percent Distribution of Years of School Completed							Median School Years Completed
		Elementary			High School		College		
	Total	0 to 4 Years	5 to 7 Years	8 Years	1 to 3 Years	4 Years	1 to 3 Years	4 Years or More	
German	100	0.3	1.1	3.2	11.8	48.8	15.0	19.8	12.7
Italian	100	0.9	4.3	3.1	12.3	51.3	12.1	16.0	12.6
Irish	100	0.5	2.2	3.9	15.7	46.4	16.0	15.5	12.6
Polish	100	0.6	0.6	2.8	12.5	46.5	20.1	16.8	12.7
Russian	100	0.0	0.0	0.0	2.7	27.9	18.2	51.6	16.0
English, Welsh, Scotch	100	0.5	1.2	2.9	11.4	41.2	18.7	24.1	12.8

U.S. Bureau of the Census, Current Population Reports, P-20. No. 249, April 1973, "Characteristics of the Population by Ethnic Origin: March 1972 and 1971" (Wash.: G.P.O., 1973), p. 31.

---

*Statistical Abstract of the United States: 1972, p. 112.

(There is evidence that today 49 percent of blue collar workers' sons between the ages of 18 and 19 are "entering college" and 20 percent of those between 20 and 24 are "continuing college,"[*] so the process obviously continues.) These same immigrants climbed the economic ladder, too, right past earlier immigrants and natives to the top.[**]

One is always disappointed that there apparently are few if any publicized, thorough, scientific studies of underprivileged children who have bettered themselves and gone to schools of higher education. For example, it might be valuable to see a study of World War II G.I. bill students, so many of whom came from lower socioeconomic backgrounds, many from first- or second-generation immigrant families. These students did not come from scholastically oriented homes and there was no family pressure for children to go to college. On the contrary, there was no expectation of going to college and the money these boys could earn on a job after leaving high school was eagerly anticipated as family income. There may have been some encouragement from the family to behave properly in school and obey the teacher, but this rule was enforced primarily by teachers, not parents. Many of these students were forced by law to stay in school until the age of 16. In short, they were work oriented and many took vocational courses in high school during the Great Depression of the 1930s. Nonetheless, when the opportunity presented itself, these "common" but competent young men went on to college and attained what was perhaps the most spectacular scholastic achievement record of any large student group in university history. One observer says the following about G.I. bill students who surged onto American campuses.

---

[*] U.S. Department of Labor, Manpower Administration, Career Thresholds, Manpower Research Monograph, v. 1, no. 16, p. 37, as noted in Andrew Levison, The Working Class Majority (New York: Coward, 1974), p. 121. The author considers that the large discrepancy between these figures and the much greater number of white collar workers' sons in both categories of college attendees reflects "the effects of...class bias in the educational system." He further points out that many workers' children attend "two-year community colleges which teach essentially skilled working-class jobs." He adds, "The number of workers who can afford to finish a four-year college course are far fewer, and, in a final irony, for many the degree no longer guarantees a good job as it once did."

[**] See "Parents, the Home Environment and Education."

> Every educator then "knew" that the large masses of students would inevitably "debase" academic standards. Instead every teacher found out that the real problem was that these students were so incredibly superior that they made demands the faculty could not satisfy.*

A study of these students' grades showed that they surpassed non-G.I. bill students in every discipline.** It should be noted that their success has been attributed to everything from their deprived background, which was said perhaps correctly to have motivated them to seize the opportunity for advancement through study (according to some of the same people who say current, much less severe deprivation kills learning incentive and even ability), to their relatively advanced age as students. What is overlooked is that, as we have seen, in the mid- and late 1930s, when these boys were the correct grade age, they showed very high academic achievement scores, and in World War II as normal age soldiers caused that spectacular increase in mean mental competence score. The G.I. bill achievements were attained by this same group. Their G.I. bill record may have been partly due to their age, but their overall scholastic and intellectual record may also have been partly attributable to the curriculum and work habits forced on them in schools of the 1930s. In Pennsylvania, probably a typical industrial state, even the vocational curricula had strict requirements, including two years of foreign language, one year of algebra and one year of geometry, one year of science, three years of history, four years of English composition and literature, etc.

---

*Peter F. Drucker, The Age of Discontinuity (New York: Harper and Row, 1969), p. 324.

**Norman Frederiksen and William B. Schrader, Academic Achievement of Veteran and Non-veteran Students, American Psychological Association, Psychological Monographs: General and Applied (Wash., D.C., 1952).

It is claimed that in the latter part of the nineteenth century:

> The school was envisaged as a means for bettering one's station in life. This gave to learning the appearance of an instrument for purposes practical and ornamental and to culture an external aspect. It was something one might acquire more or less as he buys a new suit of clothes with which to improve his appearance and to gain status, rather than the cultivation of interests and talents genuinely one's own.*

Some of this attitude about bettering one's station in life through education seems to have persisted, particularly in the less affluent areas of the country, right up to World War II, and indeed seems to persist today.** One is prompted to ask, also, whether this motivation necessarily sees fewer children ending up with "interests and talents genuinely one's own." It would be hard to prove conclusively that a person motivated, brought to and kept in school, where he is exposed to the teaching process, by the belief in upward mobility through education could never end up with such interests and talents. It is less difficult to prove that a child with no motivation or one who will not remain in or attend school is highly unlikely to acquire much in the way of academic "interests and talents." The question is probably whether this materialistic approach is more or less likely to motivate children than some higher goal, and more important whether the schools will endeavor to equate achievement in academic subjects with success, materialistic or otherwise.

---

*Thayer and Levit, The Role of the School, pp. 125-126. Used by permission of Dodd, Mead & Company, Inc.

**See p. 199 in "Parents, the Home Environment and Education," for public opinion survey results of Whites and Negroes on this issue and see also Manie Culbertson, May I Speak? (Gretna, La.: Pelican, 1972), pp. 119-120 for the attitude of Negro pupils in her class on this point.

This is not a yearning for "the good old days" in education, which might prompt the comment sometimes attributed to Will Rogers, "Schools ain't what they used to be--and never were." There was much wrong with the old schools and the period in which they flourished, but they never doubted that their primary responsibility was to educate children to "middle class" standards, a position which the schools would not abdicate regardless of the circumstances or the socioeconomic level of their charges. The system was complicated and quite sophisticated, but it was possible for the teachers turned out by our colleges, by following the system's tenets, to educate all kinds of children. Changes in fundamentals were apparently few and probably long considered before being implemented.

In the late 1930s or the early 1940s, however, apparently a change in attitude began in primary and secondary school systems which grew through the mid- and late 1940s. There is evidence that the progressive education movement probably reached new heights in this country just prior to World War II and that its influence began to penetrate the system.*
The reason for the rather sudden success in the 1940s of "a movement that had for more than a half-century commanded the loyalty of influential

---

*Lawrence A. Cremin, The Transformation of the School (New York: Vintage Books, Div. Random House, 1961), p. 324.

segments of the American public"* is perhaps a more interesting point. Perhaps the increasing influence of the "progressives" on the school system resulted from a coalescence of several factors which weakened the normal leavening influences on such innovative activity. First, the extension of secondary schooling to all had been reinforced by a desire to keep the dropout out of the job market during the Depression. Second, the new politics struck the schools. It was said, for example, that in New York City, "The atmosphere of social tinkering and experimentation, embodied by the New Deal in Washington and Fiorello LaGuardia in City Hall, reached into the office of the superintendent of schools...." Initially a limited experiment which "shifted emphasis from subject matter to the child" was successful but in 1941 the progressive method was extended throughout the city. As is the case so often, the educators' assumption that "a program which succeeded in a selective situation would also succeed in a universal situation" was wrong. The top students did well but for the slower students, who were almost to adulthood retained in high school, different "programs" were developed.

> Vocational education was one route; a diluted academic curriculum was another. Nonpromotion was frowned on, since it might impair a student's personality development.**

Third, the war had a drastic effect on the teaching staffs of our elementary and secondary schools. During World War II, it was estimated that "more' than a third (350,000) of the competent teachers employed in 1940-41 had left teaching," most "to accept higher paying positions in business, industry, and government services." Not only were many of these new teachers ill equipped to teach (almost one third worked with only emergency one-year teaching certificates),[*] but most of them were probably less well qualified than their successors to evaluate proposed new teaching techniques and programs or moderate them, and/or defend what was good about the old system.

---

*Cremin, The Transformation of the School, p. 348.

**Ravitch, The Great School Wars, pp. 236-238.

Finally, the old system came under attack from all quarters because it failed to teach what was now felt necessary for the war effort. Ever since the coming of the immigrants there had been recommendations to the schools by various commissions, including those of the American Council on Education and the National Education Association, "to place an emphasis on practical and vocational education." Since 1917 this trend had been encouraged by federal aid.[**] (No doubt the Depression further encouraged this trend.)

> There had thus developed a conflict at the secondary level between academic and vocational education. The urgent demands of the war for increased production, industrial and agricultural, and the unrest of youth threw the balance in favor of vocational education....The trend toward the provision of instruction that appeared to be more practical in character and more contributory to the war effort, as well as to the maintenance of student morale, was hastened by the war training program of the U.S. Office of Education and the introduction of preinduction courses encouraged by the armed forces.[***]

"Work-study" programs sprang up in the larger centers, e.g., the "four-four plan," under which a student went to school four hours a day and worked four hours, for which he also received credit toward graduation.* The 1940 report, What the High Schools Ought to Teach, written by a special committee for the American Youth Commission and other cooperating organizations, and published by the American Council on Education, had recommended some such program,** but it had also recommended a drastic watering down of high school academic subjects. The report recognized the probability that "teachers of mathematics and parents, wedded to the tradition," would ignorantly or narrow-mindedly insist on retaining such teaching as that of "specialized methods of mathematical manipulation which now confuse pupils...." Foreign languages were said to "consume too much time, much of which could be better spent on newer courses." Natural science courses were said to be

---

[*] I. L. Kandel, The Impact of the War Upon American Education (Chapel Hill, N.C.: The University of North Carolina Press, 1948), p. 65.

[**] Ibid., pp. 77-78.

[***] Ibid., p. 78.

> " '...often mere encyclopedic lists of the findings of scientific research. They often fill the memory with facts rather than stimulate pupils to scientific thinking.' The separation of facts from thinking is itself interesting....The Committee clearly considered the traditional curriculum to be bookish, nasty, and long."***

The whole mobilization of education for the war effort**** seems to have had a somewhat disrupting effect on education, and though the recognition of the long-range cost of losing pupils and the back-to-school drive of 1943***** may have been successful in keeping more children in school, the morale of many traditionalist teachers must have been low. They probably felt people were clearly not satisfied with their efforts, and consequently their ability to oppose the progressive forces probably was weakened. Perhaps even their own faith in the traditional approach to teaching may have wavered under the assault. In any event, apparently the way was now opened for progressives to move in.

---

*Kandel, The Impact of the War, p. 86.

**Ibid., p. 106.

***Ibid., p. 108.

****Ibid., pp. 77-109 passim.

*****Ibid., p. 86.

In New York City, "The schools fulfilled the progressives' demand that they take on the problem of 'the whole child' by enlisting an army of psychologists and social workers."* By 1947 "life-adjustment programs" with work experience for pupils an integral part were promoted nationally at local and state school administration levels.**

By the late 1940s, however, the "progressives" were under attack from many quarters--parents, taxpayers and a growing number of intellegentsia.*** A prime example of the logic behind the criticism that was coming from the more thoughtful intellectuals is the following description of the position taken by Professor Arthur Bestor in his books and articles in the early 1950s.

> ...intellectual training may not be the only function of the schools, but in the last analysis it is their raison d'etre....True education, then, is the deliberate cultivation of the ability to think through training in the basic academic disciplines: history, English, science, mathematics and foreign languages.

---

*Ravitch, The Great School Wars, pp. 236-238.

**Cremin, The Transformation of the School, p. 335.

***Ibid., pp. 338-345.

> ...Democratic education differs from aristocratic education only in the number of persons with whom it deals, not in the values it seeks to impart. To convert the education of the common man into something other than systematic intellectual training is to rob him of his birthright; it is to vulgarize culture under the guise of democratizing it. By training all in the ability to think, the schools distribute intellectual power widely among the people. This and this alone is their distinctive way of contributing to social progress.*

Under "the assault of the fifties" the progressive movement is said to have "collasped."**

In any event the "silent fifties" seem to have seen a reduction of the influence of the progressives and things apparently settled down somewhat in primary and secondary schools, as well as on college campuses. These events coincided, as we have seen, with an apparent rise in academic achievement throughout this period in primary and secondary schools.

The respite for the "traditionalists," however, was short lived. In the mid-fifties a policy decision was made in Washington that the Navy (which had no operational long-range missiles and practically no space-oriented organization or experienced senior personnel) would be responsible for Project Vanguard, the program to put a small satellite in orbit around earth. The Army, which had the operational Jupiter Missile, a top notch team of space-oriented rocket experts under Werner von Braun, and an excellent organization and facilities at Huntsville, Alabama, was specifically ordered not to attempt to launch a satellite. The men at Huntsville did in time, nonetheless, covertly design and build a satellite, at which point they were unconditionally ordered not to launch it. Meanwhile, the

---

*Cremin, The Transformation of the School, pp. 344-345.

**Ibid., p. 347.

Navy had been singularly unsuccessful in building a satellite launching missile from scratch, and the Vanguard program dragged on through a series of launch failures and other fiascos. Eventually the Russians, using a standard military rocket, managed to launch a small satellite into orbit in 1957. At this juncture Washington took the ban off von Braun and his team and in a matter of days the United States, too, had a satellite in orbit. The damage had already been done, however. Few people looked on this progression of events as what it really was: a failure in the policy area, a failure to recognize that the event was so important that bureaucratic competition and self-interest should haver have been allowed to divert the project from the group with the operational launch vehicle. Instead the media began to paint a Russia which was ahead of us in science, and the inevitable followed; our schools were seen as inadequate in the scientific fields. Furthermore, not only were our universities seen as requiring overhauling, but so were our primary and secondary schools.

Some worthwhile programs (as well as some ill-advised ones) resulted from the renovation efforts which followed, but one cannot help feeling that here again was a factor which would tend to weaken educators' morale and faith in the primary and secondary school system. Even the morale of traditionalists and moderates who otherwise might have tended to leaven the reforms which were to be pressed on the system in the sixties, might have been affected. (In fact, of course, we were eons ahead of the Russians in scientific competence, and twelve years later, in 1969, Americans, trained in the old primary and secondary schools, put a man on the moon, a feat that Soviets have tacitly admitted is still beyond them.)

As in the 1940s a coalescence of events apparently affected the public school system in the 1960s. These events appear somewhat similar but their sequence is reversed. This time, the late 1950s challenge to the schools' competence on the narrow front of what the schools traditionally have taught came first, in the form of accusations that they were not teaching science well enough. The second attack came during the Kennedy era and the "Great Society" years of President Johnson. During this period the schools were told both that they had a broader social mission which they were not meeting. Then with the rise of the youth and counterculture movements of the sixties the "relevance" of all standard education came under attack, not only in universities.

With this bombardment, traditionalists and even moderates found themselves under an attack somewhat similar to the one their predecessors had experienced twenty years before. The progressives and innovators apparently gained strength and, as in the 1940s, we again heard the recommendations emphasizing the education of the "whole child," etc. In this case, however, there seemed to be a stronger emphasis by many in the educational field on a theme which virtually said that the schools could not perform the required educational job. By the mid-1960s it was stated that

> ...for many years teacher training institutions have taken a fairly uniform stance on the environmentalistic side of the old nature-nurture controversy, and almost all writers in the blossoming literature on the "culturally deprived" have done so....*

---

*Alan B. Wilson et al., "Education of Disadvantaged Children in California: A Report to the California State Committee on Public Education, 1966," mimeographed (Berkeley, Calif.: Survey Research Center, University of California, 1966), p. 35.

The principal finding of A Study of the Achievement of our Nation's Students, U.S. Department of Health, Education, and Welfare, Office of Education, 1973, was that

> Although the role of home and family background factors in achievement greatly outweighs that of school factors, virtually all the differences in achievement associated with racial-ethnic group membership could be accounted for by considerations that were primarily social in nature and origin.

Furthermore,

> It was concluded that, at present, there does not appear to be any single approach by which the achievement levels of large portions of poor children can be transformed so that they can catch up with their more advantaged counterparts in a few years. The problem is one that affects every aspect of society and cannot be solved by the schools alone. (P.XV.)

The difficulty with the above statement is that there is a possibility that "large portions of poor children" would never be able to match the competence level of their more affluent fellow students. Their achievement level may reflect the possibility that the "large portions of poor children" under normal economic conditions in our society, with its opportunities for upward mobility, are generally likely to be of a lower average IQ level than the average IQ of more affluent children.* Under these circumstances, the achievement level of the less affluent children is likely to be lower, particularly in school systems where their retentive capability is underutilized due to teaching methods and curriculum. The important question is, however, what happens to poor children with adequate learning ability, or even to the sizable minority of such poor children who normally equal or exceed the IQ level of most of the more affluent students. Certainly those students should achieve just as well as their counterparts in the more affluent group. The usual argument is that the societal influences mentioned earlier deprive the children of the poor with adequate IQs from being able to utilize them. For example, the "fading" phenomenon noticeable in the early grades among underprivileged children who have had intensive preschool training (IQs hold up better than cognitive tests) has been explained by the statement that the training was not sufficient "to offset the massive effects of a low income home in which the child had lived since birth onward."* That a similar dropping in average achievement level as pupils move to higher grades is almost a universal phenomenon affecting pupils at all socioeconomic levels state- and countrywide (see pp. 48-87 of this study), seems to suggest the possibility of other causes.

---

*See "Parents, The Home Environment and Education," p. 201; see Herbert Ginsburg, The Myth of the Deprived Child (Englewood Cliffs, N.J.: Prentice-Hall, 1972), p. 23, for data on variance in children's average IQ level in relation to the skill of fathers' crafts.

The HEW study mentioned above also seems to say, however, that the socioeconomic level of the family is not nearly as relevant to the child's achievement in school as the expectations of his family that he achieve well. Parental interest in the child's achievement reinforces the idea that he is expected to do well. As one would anticipate, the HEW study (pp. 142-143) shows a relationship between children with high IQ scores and the degree of family interest in their scholastic activity. Most important here, however, are a) whether parental interest among any and/or all socioeconomic groups is less now than in the past (as we have seen academic achievement among affluent and high IQ students is apparently falling rapidly too), and b) whether, in the absence of parental interest and incentives, the school can provide this demand on the child --the idea that he is expected to learn, work hard, measure up. The statement that

---

*Gray and Klaus, 1970, p. 13, as quoted in Harry A. Averch et al., How Effective is Schooling? A Critical Review and Synthesis of Research Findings, R-956-PCSF/RC, March 1972 (Santa Monica, Calif.: The Rand Corp., 1972), p. 117.

> ...if learning styles and needs are a function of family background, and the schools are able to match individual student learning styles with school resources in such a way that the outcomes of schooling are more nearly equal to the poor children, then we would not be unhappy with this result[*]

could mean, for example, a greater stress on retentive ability in teaching poor children. But one also fears an interpretation which could mean further questionable tampering with a functioning system. In light of the "longitudinal study" of the history of our school system, what may be called for here is not a change in the style to match poor children, but an insistence on the part of someone, either the parents or teachers, that the students measure up to the standards as they are. That seems to be the dominant factor among all those in the study quoted above. One becomes concerned, however, when the study discusses learning styles. Apparently what is required is motivation, and one of the proven motivations seems to be that people expect children to do something. It is better if the family expects them to (and, as we shall see, the degree of expectation does seem to be considerable among the majority of parents[**]) but one feels "surrogate fathers and mothers," that is, the teachers in loco parentis, should try to give the impression that they too expect these children to work hard to achieve the difficult in the traditional way. According to one observer, a former English teacher, however, "Some teachers say flatly that the grammar, the speech pattern, of any individual is all right....Each group has a correct grammar; there is no one correct way."[*]

---

[*] U.S. Department of Health, Education, and Welfare, A Study of the Achievement of Our Nation's Students, Publication No. (OE) 72-131 (Wash.: G.P.O., 1973), p. 144.

[**] See "Parents, the Home Environment and Education."

There are indications that schools which maintain high academic standards serve good purpose, particularly for underprivileged students.

> Students in schools where teachers have stronger educational backgrounds, and higher levels of verbal achievement themselves, benefit by this exposure. This is especially true of minority group children. (It is generally true that disadvantaged youths are more sensitive to extra-familial environmental influences, while middle-class children are not so strongly affected.)[**]

In fact in one experiment teachers were given fictitious "intellectual potentialities" for their students and by the end of the year pupils' IQ test scores "showed changes commensurate with the false information that had previously been given to the teacher."[***] A worldwide study indicated that in areas where everyone was "deprived" as far as help from parents was concerned, such as foreign languages and science, "school conditions were generally more important." The speculation that this effect might result from the fact that "reading is very closely related to language acquisition which starts at home, while science and foreign languages are more school oriented"[****] is quite important. If true, this may mean that the more things which can be maintained as "school oriented" (i.e., demanding something which is desirable for the child to aspire to that may be different from what the child is accustomed to at home), the more likely we are to be successful in raising the child from his disadvantaged position. Mathematics with its meticulous work can be "school oriented"--even behavior and correct grammar might become school oriented if they are demanded of children, etc.. And one feels that a Puerto Rican, Mexican or other non-English speaking child, if we treat him as we did immigrant children of old and insist he learn in English language classrooms, may do better than his homelife would indicate, for this is a "foreign language" which is school oriented with no relation to his home life. The statement in The Coleman Report that "equality of educational opportunity through the schools must imply a strong effect of schools that is independent of the child's immediate social environment..." is very pertinent. The report adds, however, "that strong independent effect is not present in American schools."*

---

[*] George C. Kohn, "'Grammar don't Matter'?," Christian Science Monitor, July 15, 1974, p. 9.

[**] Wilson et al., "Education of Disadvantaged Children," p. 35.

[***] Ibid.

[****] The New York Times, November 18, 1973, p. 59 L.

The above would seem to imply that one of the steps in this direction is to maintain the requirements and the standards in the schools. Instead, as we shall see, many school systems have lowered those standards in the very schools where these underprivileged children are in the majority.

The question arising from the above statements obviously is why that "strong independent effect" is not now present in our schools.

There is a feeling among some educators that we are unfairly penalizing underprivileged children by slanting the education toward areas in which they are less competent. In fact, the argument can be made that the whole process has always been biased against those less verbally inclined.

---

*James S. Coleman, Equality of Educational Opportunity (Wash.: G.P.O., 1966), p. 325.

> Since, moreover, teachers have tended to be verbal-minded, it was natural that they should favor the verbally inclined over other types of mind and find them easier to instruct. Likewise, with the advent of intelligence tests--instruments which have consistently been skewed in favor of the verbally intelligent--educators as well as laymen have been prone to infer that the verbally intelligent are over all the more intelligent.*

Perhaps one cannot dispute this position on teachers' preference (the IQ test argument may not be nearly so convincing), and over all one feels that we must guard against downgrading the other skills. Certainly we want the underprivileged to strive to become more like those who have been successes in this society, and apparently, among others, adequate written, as much as or more than spoken, verbal skills are important to success in our system. At the same time other skills are also important in our system, those which allow a person to do things, to discover things, to find solutions to problems, to make decisions, etc., even though that person may not be able to write or speak eloquently on the subject. Before one goes too far down this verbal preference road, one must hasten to point out, first, that demands on students to acquire verbal skills were never that excessive and, as we have seen, verbal achievement, and according to considerable evidence, demands, have apparently decreased in recent years among pupils in all socioeconomic levels, and second, that the skills which are held in such high esteem in our schools are by no means all verbal. There is and has been over the years a great emphasis on deductive reasoning, whether in mathematics or in matching comparable geometric figures and lines.

---

*Thayer and Levit, The Role of the School, p. 124.

In fact, this emphasis has increased to a point which might be, at least for some children, counterproductive to the learning process--many current educators do not like rote learning. "...a heavy amount of memorising is [fashionably] thought to kill spontaneity and curiosity; by generating a passive outlook, it is believed to decrease creativity."*

Some facts "...can be logically organised--but no one has discovered how." In such cases,

> ...there is good evidence that creative problem solving only occurs if all possible relevant data are so well remembered that they can be recalled very rapidly. It seems then that, paradoxically, rote memorisation is required as the first stage for achieving creative insight.**

This is surely true in the fundamentals of many things children must learn. We do not teach children the complexities of the equinox before they learn that there are seven days in a week, twelve months in a year (which in the last analysis is to some degree arbitrary: why not eight months, why "thirty days has September...twenty-eight for February," etc.) It is also very difficult to explain why the noun "table" is masculine and "chair" feminine in a foreign language, in English why "i before e except after c", why the silent letters, etc.

Part of the opposition to rote learning seems to stem from the fact that some educators identify it with the discipline and structure of the old school system, which they are likely to call a lock-step system, and to compare to a "minimum security prison." Unfortunately, in this way, some of those who were most vocal about helping the underprivileged were, by their refusal to consider the use of rote learning, perhaps also likely to be those who were reducing many underprivileged children's opportunities for learning.

---

*Andrew Mayes, "Remember, Remember," New Society, November 1, 1973, p. 468. This extract is taken from an article which first appeared in New Society London, the weekly review of the social sciences.

**Ibid., p. 469.

In the past decade and a half a "multiplying number of curriculum projects" have been fostered by "public and private funds." It has been noted that "associated with the curriculum-reform movement is the idea that students should be taught not an encyclopedic collection of facts, but the basic principles and concepts and methodology which impart meaning and organization to the details and data of a subject."* Deductive reasoning may have been understressed in the past, but in the effort not to teach "an encyclopedic collection of facts" and to stress deductive reasoning, there often appears to have been a virtual all-out attack on the use of retentive ability in schooling. In fact, the extent of the apparent downgrading of the teaching of facts is disturbing. We are familiar with the displeasure that many modern educators display when they talk of "just learning facts" in history. Names, dates, and chronology in history have lost much of their importance in many educators' minds. Even in mathematics, children often are no longer required to memorize as they used to.

One could make a persuasive argument that the child with retentive ability is a second class citizen in school and that it is made clear to him every day that this is so. Unfortunately, among children at the lower end of the IQ scale it may be in the number of children who display high retentive ability where the underprivileged may normally be the more likely to be able to compete with (or even surpass) middle and upper middle class children. (Underprivileged children of average or above average IQ are said to show no such difference from the higher socioeconomic group children of similar IQ.*) Such evidence has convinced at least one psychologist that "...it may pay educationalists to exploit the fact that many children with low IQs have superior rote learning capacity."**

---

*Thayer and Levit, The Role of the School, p. 365. Used by permission of Dodd, Mead & Company, Inc.

Whether these children come from higher or lower socioeconomic groups is unimportant, however, because all we need worry about in the school system is whether these children learn to the best of their ability. Because the child is not of a high IQ does not mean that he does not have the right to learn to read and write and do basic mathematics. He is no less a citizen than the high IQ child and has the same right as anybody else to achieve to the best of his ability. This raises the possibility that in one respect our schools as well as, or rather than, the family or neighborhoods, may have become "suppressive environments" for many children because people refuse to teach by the rote method and insist on using others which require a rather high degree of deductive reasoning. This may be one of the reasons why large segments of our population are not able to achieve to the best of their ability and are deprived of the basic skills required in our society for the pursuit of happiness. One is forced to ask if prior to the days when this ability was wasted, these children did not perform better than they do now. Certainly one had the impression in those days that less gifted and/or economically and culturally deprived children who completed school had learned to read and write, had learned some basic geography, history, grammar, some science and civics, and generally were prepared to be productive citizens upon leaving school. Furthermore, achievement scores of grade and junior high school children of the mid-1930s seem to bear this out (see Chapter II, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, pp. 31-34). In that time period not only were there opportunities to use retentive ability, but there were minimum requirements which students had to meet to move from one grade to another. It seems for better or worse in the innovations in our schools over the past decade these factors have lost much influence.

---

*Arthur R. Jensen, Genetics and Education (New York: Harper and Ros, 1972), pp. 242-243.

**Mayes, "Remember, Remember," p. 470. This extract is taken from an article which first appeared in New Society London, the weekly review of the social sciences.

In specific subjects, the most publicized innovation has no doubt been in mathematics instruction in primary schools. The "new math" stresses an emphasis on logic which may have a very debatable effect on small children. Certainly one can question the wisdom of introducing into lower primary grades a whole new jargon of cumulative, associative and distributive laws, etc., and extensive and convoluted "proofs," when children are trying to learn if 3 plus 2 is the same as 2 plus 3. Even describing which numbers come between 6 and 9 is likely to emerge a complex speech on sets and set intersections rather than "7 and 8."* The possibility of confusing even the brighter children on issues of just how mathematics develops is perhaps also increased by this method. "...It was intuitive evidence that induced mathematicians to accept [less intuitive numbers and concepts].

---

*Kline, Why Johnny Can't Add, pp. 1-3.

The logic always came long after the creations and evidently was harder to come by."[*] Quoting Henri Lebesque, Kline records, "No discovery has been made in mathematics, or anywhere else for that matter, by an effort of deductive logic;...its role therefore, though considerable, is only secondary."[**]

It quickly became obvious that despite whatever the level of the "new math," within our great states' school systems, children were having difficulty in mathematics.

> One of the most striking phenomena in the PEP [Pupil Evaluation Program, New York's own standardized achievement test program] score data is that over time more and more children throughout the state are falling below the minimum competence in both reading and mathematics.[***]

Similar evidence, as we have seen and as the Appendix illustrates, exists nationally and in most of our sample states. Furthermore, there seemed to be very well qualified people questioning the effect of the "new math" on students. "...the concentration on the deductive approach omits the vital work. It destroys the life and spirit of mathematics."[****] By the end of 1964, Dr. Berberman, one of the chief proponents of the new math, had integrity enough to admit that "we're in danger of raising a generation of kids who can't do computational arithmetic."[*****] But if this were obvious to primary and secondary school teachers, it did not prevent them from plowing on. For a decade in classrooms where this math was really taught (many new math classes were heavily salted with traditional teaching), children were subjected to this method of teaching mathematics, stressing the deductive process of education, while their retentive abilities (traditionally developed through drill in this area) were largely untapped.

---

[*] Kline, Why Johnny Can't Add, p. 39.

[**] Ibid., pp. 48-49.

[***] The Fleischmann Report, v. 1, p. 29.

[****] Kline, p. 49.

[*****] Ibid., p. 110.

The burgeoning of the new math coincided with an awesome innovation--the fashionable new attitude of educators toward pupils themselves, e.g., they were declared to be simply small adults and treated as having an approach to issues which differed very little from that of adults. The deductive approach to mathematics was made extremely rigorous. Pupils were confused by less clear cut, complicated proofs and demonstrations meant to prove what was otherwise obvious.* In 1962 Dr. Berberman had emerged an outspoken critic of his own program:

> I think in some cases we have tried to answer questions that children never raise and resolve doubts they never had, but in effect we have answered our own questions and resolved our own doubts as adults and teachers, but these were not the doubts and questions of the children.**

By 1973 The New York Times was reporting

> Ten years after a fundamental revision of the teaching of mathematics with its emphasis on sets, another major revision is in the works for the elementary schools of New York State. The swing is back to a stress on computational skills, including old fashioned arithmetic drills.***

Interestingly enough, though "most of the groups [advocating the new math in the late 1950s and early 1960s] undertook almost no experimental work,"[*] the swing back to a time-tested method was "to be tried in the schools on an experimental basis" starting September 1973.[**]

---

*Kline, Why Johnny Can't Add, p. 55.

**Ibid., p. 110.

***The New York Times, January 8, 1975, p. 84.

As always with a deductive approach to teaching, the underprivileged children, who coincidentally increased in number in our large northern cities during this time period, were hardest hit. Their parents, products of a primary education in "vastly inferior" (sometimes southern) schools, were often better grounded in math than their children who finished twelve years of fabulously expensive education. One problem indeed seemed to stem from one of the most obvious innovations (mentioned above) in the new approach--children had not been forced to "drill" as of old. For example, they did not learn the multiplication ("times") tables. Since they could not readily multiply, they could not do long division. They had difficulty adding columns of figures because they were not given enough practice. Once a concept was taught, drill or rote memorization of salient facts, necessary to grasp a concept, and scholarly, meticulous work in employing the concept, were not stressed. Here again, one fears that despite many dedicated teachers' anguish, the easy road for the teacher was often followed, i.e., that which is difficult was avoided. For example, teachers apparently are often reluctant to correct pupils' homework or insist on additional work (which again would require correction) from those pupils who need it. (When assigned, homework is often corrected by pupils themselves by exchanging papers, which takes time away from the already short class period, and is far less likely to provide teachers with a detailed knowledge of each pupil's needs.)

---

[*] Kline, Why Johnny Can't Add, p.103.

[**] The New York Times, January 8, 1975, p. 84.

One teacher writes about this issue:

> Let's abolish homework....Let's stop impeding the natural spontaneous after-school learning of children....Let teachers use classroom time constructively so that students have opportunities to try out new ideas and new skills with teacher guidance.

Parents are thought by this educator to be behind the times with ideas that school, like medicine, to be effective must be unpleasant.* Apparently such teachers as this give little thought to the possibility that parents may be asking for the kind of practice they empirically know children (in this case high school adolescents) must have to acquire a skill. "Let parents know that 200 minutes per week is of any subject, or discipline, enough to learn that discipline." School administrators are also asked to ignore this possibly legitimate parental motivation. "Let school administrators do their part by trying to realize that parental approval of homework cannot be considered sound justification for making the educational decision to keep it."** We are increasingly witnessing a new phenomenon in households across the country: family problems resulting from, on the one hand, parents trying to halt their children's sinking scholastic achievement levels by demanding more effort on their studies (homework), and on the other, the teachers in league with children in resisting this parental demand. Furthermore, many dedicated teachers may be reluctant to "make waves"

---

*Paul Lissandrello, Jr., "The Last Days of Homework," Changing Education (journal of the American Federation of Teachers), Winter/Spring 1974, p. 38.

**Ibid.

(as well as more work for themselves) by demanding significant amounts of difficult work, in school or out, from pupils not accustomed to it, and fellow teachers may often not be pleased with teachers who do.*

Nor, as we have seen borne out in achievement score data, does this whole process of lowering standards affect only (or in some case at least even primarily) the disadvantaged pupil. The very top category of students is supposedly taught high school courses in junior high school and college courses in high school, but since there is only a finite amount of time in school each day, and since there is some evidence to indicate that their achievement scores are likely to be falling even faster than those of less gifted children,** adding new material may actually have meant inadequate time for the old, fundamental courses for the brightest children as well. Furthermore, one is forced to ask if, during a time when there was evidence of less teacher interest and dedication as well as some evidence of a drop in competence, we should allow educators to tamper with a functioning system, to say nothing of adding complicated, difficult-to-teach courses to the curriculum. The validity of this advancement in high school to college course level is not unconditionally accepted by all educators; some definitely deny it:

> As far as I can tell, the high school has now reached the level of the grade school; the college is at high school level; the

---

*The author knows of one instance where a New York City high school teacher made the effort to teach a tenth grade business mathematics class to convert fractions to percent (it is not uncommon for such pupils not to know this process), only to have questions on the conversion of fractions to percent omitted from an upcoming departmental test because the other teachers had not made a similar effort.

**See pp. 48-87 and the Appendix by Paul J. Bracken.

> graduate school at college level; and whatever reading and writing is being done is being done by professors....*

Along with the statistical data noted earlier and the evidence in the Appendix, there is much anecdotal evidence that the more gifted children too are not necessarily taught that which does not come easily, nor are they necessarily instilled with correct study habits.**

Perhaps, however, the greatest "innovation" in mathematics in large industrial state high schools in recent years is that a child can graduate from high school without having had either algebra or geometry. This is in contrast to pre-World War II mathematics curriculum requirements. Today a child need only take "pre-algebra" or high school arithmetic in order to graduate.

In foreign language, advanced courses are offered along with basic language courses in some high schools. Foreign language courses can sometimes be started in the lower grades of junior high school as electives. Here again, however, the greatest change (compared to pre-World War II high schools) is that students can, if they so choose, get a high school diploma without ever having been required to take a single class in a foreign language.

---

*Shapiro, "Is This Really the Brightest Student Generation?"

**For example, when a father asked a few questions of his child, who was in the advanced senior math program in one of the finest high schools in one of the most affluent communities in New York State, he found that the youngster did not really understand sine or cosine. At the time, the pupil was supposedly taking calculus and had had "trigonometry" the preceding year. On entering college the following year, the work demanded simply overwhelmed this intelligent youngster; the result was another college dropout.

In chemistry and science, much more equipment is available to students who wish to take these courses, but again they are more often not likely to be required subjects.

Geography is no longer taught as a subject in many primary schools and a type of social science curriculum is often offered as a substitute for geography and history. Reflecting the emerging theory of teaching history, American history is often taught thematically rather than chronologically, e.g., immigration and reaction to immigrants from the earliest times to today for a few weeks, then another theme, etc., with, one fears, inadequate emphasis on interrelationship or general sweep of history. Furthermore, courses superficially covering vast areas and time spans (e.g., Afro-Asian studies--from Dakar to Tokyo, from 3000 B.C. to 1974 A.D.), beyond the competence of almost any high school teacher (or even college professor), are now taught instead of traditional ancient history. "Relevancy" has become a key word and it too often is interpreted by educators from the simplistic viewpoint of mid-adolescence, instead of the deeper view of history's relevance, the story of our civilization, to everything we do.

In English too there are courses for advanced students, but the old standard literature courses, etc., are no longer required. Electives are available because of "enrichment" programs, which allow students to take courses of less academic value requiring little effort:

> ...many of the new courses are intended to offer pupils a choice of studies and answer their contention that the school curriculum is not relevant to their daily lives and concerns.

Sampling indicates a "trend toward substitution of specific courses for traditional combination offerings, particularly at the upper high school levels."*

	Enrollment (%)	
	1960-61	1970-71
World History	12.5	9.2
American Literature	16.7 (all 11th graders--part of 11th grade English)	6.7

U.S. Department of Health, Education and Welfare, Patterns of Course Offerings and Enrollments in Public Secondary Schools: 1970-71, Publication No. (OE) 73-11400 (Wash.: G.P.O., 1972), p. 5

Pupils now take vaguer courses such as world cultures. English language arts include such courses as mass communications, radio/television/film, etc. Courses such as Environmental Problems, Environmental Sciences, etc., are on the rise.**

A closer look at some of the electives in English in one district shows such "mini course" (½ credit) offerings as "I Love a Mystery," "Sports Communication," "Responding to Media," and "Art of Film."*** Mothers find that their youngsters have been watching films like "Butch Cassidy and the Sundance Kid" in school for English credit. Though their verbal skill test results continue to plummet, apparently the requirement to read the great authors is shrinking. In some affluent (and some not so affluent) school districts, the ultimate in this type of "innovative" curriculum procedure seems to have been accomplished: junior and senior high school students attend such courses as the history of witchcraft and "witches" are brought in to lecture to them.* It must be noted that all of the above elective activity detracts from traditional learning, for all this is carried out within the few hours of the regular school day. (After-hours work with pupils--with the exception of paid sports coaching jobs, etc.--has become much less common for teachers these days.)

---

*U.S. Department of Health, Education, and Welfare, Patterns of Course Offerings and Enrollments in Public Secondary Schools: 1970-71, Publication No. (OE) 73-11400 (Wash.: G.P.O., 1972), p. 5.

**Ibid.

***Electives in a downstate New York suburban school district.

One cannot but get the impression that though there are at least nominally some good courses for the better college-bound students from homes where school issues are well understood, the required courses have declined since the older parents of recent high school students attended school. Underprivileged students are likely to emerge even more unfavorably influenced under these circumstances. With parents who are unfamiliar with educational jargon, and who feel that since their children are going to high school things must be all right, students are free to take the easy way out (and actually be encouraged to do so by educators and guidance counselors).

Furthermore, the recent well-meaning attempt to intervene "in the life of the school so as to compel a more effective instructional response to those who profit least from prevailing arrangements"** can apparently also be a dangerous process, can lower standards by trying to "reach" the children. Reaching for deprived children too often today seems to mean reaching down. There are those who dispute the premise that pupils should be taught to emulate the traditional, standard grammar, vocabulary, reading habits, etc., of the middle class. As mentioned, according to a former English teacher, "Some teachers say flatly that the grammar, the speech pattern, of any individual is all right. No one should be made to feel 'inferior' because of his way of speaking and writing."* Nonetheless, the traditional idea has been to try to help the children meet certain standards, which is difficult. It is much easier to allow a slum child to use street grammar, with or without the assumption that he eventually will somehow learn the correct grammar. ("Teachers and many adults have felt that the old grammar was too rigid and irrelevant....Besides the old grammar is too hard to teach to the masses."**) It is also difficult to make a child behave himself; many things are difficult and distasteful for young children. While that may be unfortunate, they are not necessarily wrong.

---

*E.g., such courses are offered today in an affluent upstate New York high school; nor does this school seem to be alone in such offerings.

**Professor Ron Edmonds, Harvard Graduate School of Education, The New York Times, November 18, 1973, section I, p. 59 L.

The tendency to put more emphasis on vocational training in schools, again, is a questionable process, with certain exceptions such as office skills--typing, shorthand. Schools are usually ill prepared to, in effect, run apprenticeship programs. Furthermore, there is strong evidence of long standing that children in these programs are neglected as far as the basic skills. It is much more important that a school teach a child to read and do basic mathematics than to run a lathe, which he can learn on the job. If he reads well and knows basic mathematics, he can supplement any on-the-job training he needs by reading. It is very clear that the abilities to read, write and cipher are much more important for those who wish to enter apprenticeship programs than are shop courses.* In fact, some unions are asking for apprentices with at least a "C" average in high school; they do not stress the requirement for having had shop courses. Obviously an "A" student in the standard high school subjects who also had had shop courses would be a great find. But it is wrong to downgrade standard skills in schools, even for those who think they are going to spend their lives in a trade. Children in high school do not know, nor do their parents, what they will be doing in later life. If an opportunity should arise for them to go higher by means of advanced education, or positions which require better education of the classical type, these children should not be denied that right because of the failure of schools to insist that they learn the fundamentals in the traditional academic areas in primary and secondary school.

---

*Kohn, "'Grammar don't matter'?," p. 9.

**_Ibid._

---

*The biracial Rodgers Committee, investigating charges of discrimination against Negroes and Puerto Ricans in construction unions in New York City in 1963, reported:

> One of the greatest eye openers to this Committee was the apparent abandoning of many youths in our school system. Most of the Committee was shocked that boys who were graduates of our vocational high schools...could not spell such words as "brick," "carpenter," "building," etc., or could not add inches and feet....It is quite apparent that they are the product of a social system that pushed them through the earlier grades of school without insuring that they had the basic tools necessary for a minimal academic education....
>
> We call attention to this problem because the apprentice in any trade must come equipped with these tools. F. Ray Marshall and Vernon M. Briggs, Jr., The Negro and Apprenticeship (Baltimore: Johns Hopkins, 1967).

In fact, the more one looks at the evidence, the more one gains the impression that the current educational process, particularly in large cities with their large numbers of underprivileged children, should be viewed with considerable skepticism. The reason for this growing, if not overwhelming, feeling is that though there are differences in our current society, many of its "insurmountable" problems seem similar to those which apparently were surmounted in the past. The difference appears to be the way the current school system is attempting to overcome the problems. The arguments so prevalent today seem to intimate that it is virtually hopeless to attempt to educate children to the traditional level of competence unless they come to school endowed with the correct social attitude, behavior, grammatical knowledge and IQ. Interestingly, however, as we have seen, the better endowed children are also slipping academically, often faster than the less well endowed.

There have always been school children at the lower end of the socioeconomic and IQ scales, as we have seen; they have always been more difficult to teach subjects which require deductive reasoning in the higher grades. Yet just prior to World War II, fifty percent of children starting school finished high school* with the high academic achievement record mentioned earlier. Clearly these high school graduates included many with far less than top percentile IQ scores, but all students, including dropouts, could read and cipher. At this juncture, one might begin to wonder if educators are begging the question.* The idea is to teach children to read and cipher. Those who already know how to read when they come to school, or who have parents who spend time teaching them arithmetic at home, are in less need of the schools than deprived children have always been. But that is what universal public education has traditionally been all about. (One can't help noticing that in the 1950s and 1960s, as in earlier periods of heavy immigration, an influx of rural, disadvantaged children penetrated our big city school systems. In these instances, however, only a tiny minority did not speak English, and southern cities as well as northern cities experienced the influx.)

---

*Statistical Abstract of the United States: 1974, p. .

At the same time, the standards of behavior, grammar and effort have apparently been continually lowered. In effect, one fears the schools may no longer be trying to raise students' achievement to the level traditionally required for success in this country.

This is possibly the worst position to assume. Children are very sensitive to the degree of adults' resolve when they make demands of pupils. Elementary and secondary school pupils are deluged with many kinds of requests; the only way they can determine priorities for meeting them is by gauging the adults' sincerity on each specific issue. The fact that many adults involved in our educational process have not firmly and consistently demanded that underprivileged children strive to meet middle class standards may well indicate to students a general lack of sincerity in all requests.

---

*Daniel Klepak, the state's so-called education watchdog, declared yesterday that a study made by his office had demonstrated that "schools can teach inner-city children to read" and that it was time to scrap "self-fulfilling prophecies that disadvantaged children simply can't learn." The New York Times, April 4, 1974, p. 17.

Perhaps more important is the fact mentioned above, that bringing children out of their deprived status is difficult, for there seems to be evidence that too often in the past decade, the difficult has tended to be avoided in our schools.

A large body of anecdotal evidence, as well as the statistical evidence cited earlier and that contained in the Appendix, indicates an apparent drop in student competence at all levels of intelligence, as measured by standard achievement and aptitude tests. This evidence seems to be strong enough to give pause to the prudent parent in supporting the whole new approach to educating children.

The emphasis on "teaching students to think" and stressing "immediate pupil response and constant exchange between pupils and teachers" (rather than preceding discussion with lecture) through such procedures as "inquiry" learning should perhaps be reevaluated in light of how these approaches might influence children's learning activities.

> The schools have adjusted to the new style by sacrificing much of the analytical part of learning to mere spontaneity. Under the onslaught of critics who consider all drill autocratic, teachers have moved away from parsing sentences, analyzing ideas, and preparing outlines. Modern language enrollment has declined sharply.*

Apparently one of the most critical rocks upon which modern education has foundered is the inability of educators bent on encouraging individualized education to recognize the degree to which the individual could be emphasized within the existing school system. In their rush toward individualized education, these educators were seemingly unaware of the inherent values of the old system which they were actually discarding.*

---

*Fred M. Hechinger, "What Happened to the Best and the Brightest?," Saturday Review/World, February 9, 1974, p. 65.

To the extent that the "new style" increases pupil tendency to feel everything is relative--so facts are not particularly important, and consequently, one person knows as much as anybody else about almost any subject--the process tends to downgrade the value of being well informed, and the structured existence of the child could be adversely affected. In fact, we have seen children who have been told in recent years that they had the only true grasp of things, that adults should learn from them. This could be a bad situation, especially from the viewpoint of underprivileged children.** Children's learning is likely to be affected by adults who seem to lack the courage of their own convictions and who are uncommitted and uncertain the educational milieu. There is evidence, for example, that, "It is the old style, strict, highly structured teacher who appears to be the most popular and effective with underprivileged children." The evidence indicates that

> The progressive approach...does not catch on. It has too many features that are essentially alien to the culture of the deprived: the permissiveness; the accent on self--the internal--the introspective; creativity and growth as central goals of education; the stress on play; the underestimation of discipline and authority.***

---

*Hechinger, "What Happened to the Best and the Brightest?," p. 65.

**After attending a class in which a teacher told high school pupils that she learned more from them than she learned in college, one pupil commented incredulously about the quality of her alma mater to the author.

***Lester G. Crow et al., Educating the Culturally Disadvantaged Child (New York: McKay, 1966), p. 85.

In no way does this statement endorse the theory of teacher as martinet, but even with brighter students the structured existence of the school is probably very important and the new approach may endanger it. The teacher's authority must and does come from the form of the school's administrative structure, but finally this stature derives, particularly when dealing with older children, from the fact that the teacher is an authority: he has a superior knowledge of the subject matter he is teaching. His superior knowledge must, by definition, be based on a greater fund of concepts and facts, if he is to impress the child. Younger children will think that adults are smarter than they, but as they mature, their acceptance of adults' superior knowledge becomes conditionally based. According to one educator,

> In the school, students grant initial respect to the authority of the teacher but continue it only as long as teachers earn and deserve it. Teachers are respected when they know their subject...are excited by the challenge of ideas...are sincerely interested in the students' welfare...and set high standards for themselves and their classes.*

No adult who has ever had any association with children has failed to hear early adolescents talk, usually unfairly, about their teachers as "stupid," "silly," etc. This is endemic to a situation where young people deal with an adult. Their experience is so limited that, for example, they are likely to be unaware of restraints which rule out many ideas they feel are realistic. A teacher's duty is to impart the knowledge he possesses to the children so that their growing store of knowledge will eventually allow them to take these factors into consideration for future learning and/or decision making. As indicated earlier, the unavoidable truth is that oftentimes the teacher has a lower IQ than some students in the class, and although it is not uncommon for teachers to like to bolster their egos by "winning" arguments with their students, unless they do this based on their superior knowledge of facts, usually restricted to their own fields, many teachers are going to find themselves outwitted by their adolescent students. Furthermore, if they have impressed these children with the idea that facts are not particularly relevant, then the only way less intelligent teachers can maintain control or authority is by stressing what appears to the children to be the teacher's position in the arbitrary administrative structure of the school.

---

*Clara M. Dobay, "The Sick Classroom," The National Observer, March 9, 1974, p. 22, reprinted from the Texas Outlook, publication of the Texas State Teachers Association.

There may even be more far-reaching effects in this situation. The only formal, structured environment with which children have close contact outside the family is the school. This organization might begin to look insecure, and children might begin to see it as having no more behind its existence than an organization chart. They might not perceive its right to exist, based on its superior capability to impart knowledge to others, and they might develop an unhealthy skepticism, not only about the structural envionment and authority of the school, but about other organizations, governmental and non-governmental. (Interestingly enough, from 1967 to 1971 educators often encouraged a kind of alienation from the government among students, apparently without seeing its connection to a similar effect regarding schools and educators.)

In general discipline has slipped, in many schools to a degree that is a very significant factor in determining educational policy. Obviously, if the teacher cannot make herself heard, she cannot teach. If it takes five to ten minutes of a forty- or fifty-minute period for pupils to "settle down" (many teachers wait for them to do so), another five minutes to maintain order during class, and a few minutes at the end of class for children to gather belongings, etc., pupils are actually taught for only thirty minutes or so. If children are only receiving so few minutes of daily sporadic instruction in difficult subjects like mathematics, reading, or grammar, it is highly unlikely that even well-qualified pupils will achieve to their maximum. Nor is this situation confined to the worst schools; in varying degrees such conditions are not uncommon in many areas. The big open classrooms (and many standard classrooms) in upper middle class neighborhoods can be chaotic. In cross-bused, lower middle class and slum districts, the classroom atmosphere can range from hectic to dangerous; of course in the last (far from majority) case, education can diminish in importance to both students and teachers. The halls and restrooms (and sometimes classrooms) can become gauntlets of danger to be avoided or run, with first priority being the preservation of one's property and physical well being.

B. Frank Brown, Chairman of the National Commission on the Reform of Secondary Education, stated

> We have 66 percent of the school systems now employing police....I was in one school that has been written up seven times in four years as one of our great schools. I talked to 13 girls before I found one who wasn't afraid to go to the rest room. They go to the gas station across the street.*

---

*The National Observer, October 13, 1973, p. 1.

In New York City teachers are being issued self-defense handbooks by the United Federation of Teachers to help them learn to protect themselves and their students from menacing students and outsiders on school premises. Among its recommendations, the handbook advises teachers to "talk politely to wandering older students when challenging them in hallways"; in dealing with attacks by elementary school students (first to sixth graders), "If a teacher anticipates an attack is coming, he should get as close to the child as possible; spin the youngster around; and embrace him in a bear hug that pins his arms to his body." Another section advises teachers "how to protect themselves against rape." This section reads in part, "Most rapes and other sex crimes occur in classrooms, faculty rooms and work rooms--when the teacher is alone. The surest means of preventing sexual attacks is never to be alone."* Experience tells us this includes being alone with a few students before or after class, for such groups have raped teachers in New York City. In that city's public schools in 1973 there were 558 reported assaults on teachers, 697 reported assaults on students, 159 on "others" and a total of 420 arrests, apparently a new record for school violence. It had definitely increased over 1972: "The number of reported assaults against teachers, their aides, custodians and other personnel rose from 634 in 1972 to 717 in 1973...."** In order to protect the students, teachers, and buildings against violence by outsiders and other students, the number of security guards was increased from 732 in January 1972 to 1,815 currently (970 in high schools and

---

*Daily News, January 29, 1974, p. 5.

**The New York Times, January 28, 1974, p. 31; Daily News, January 28, 1974, p. 5.

845 in elementary and junior high schools). These guards arrested 420 suspects "in connection with crimes committed in or near the schools," compared with 305 arrested in 1972.[*] Jeremiah McEnna, the general counsel of the New York State Legislature's Select Committee on Crime, says "brokerages" are functioning in the New York City schools "where teenagers buy and sell guns, narcotics or the services of youthful male and female prostitutes." According to Mr. McEnna, the brokerages occupy "designated places...where the trading [takes] place during specified hours." Nor are these deals particularly covert; the students have the faculty intimidated: "The teachers in the school generally know about these illegal activities...but they are usually afraid to talk about them." Furthermore, Mr. McEnna asserted that "frequently school officials will not give the police the cooperation required to mount an undercover operation...."[**] Nor is New York that atypical of large cities with significant numbers of slum schools; as we have noted, two thirds of the school districts now employ police, and large numbers of them are for functions other than guarding property at night.

Even excluding crime, any objective observer could not help being amazed at the change that has occurred in schools, particularly those with a majority of less affluent students, during the 1960s and early 1970s. The noise alone in schools in all neighborhoods today is often bewildering, not just in the halls. The gutter language used by pupils (and even some teachers) in today's schools would have been considered a great disgrace in past decades. Apparently filthy language in mixed company and other disreputable habits, indulged in by the dregs of all societies, are no longer considered by our school systems as behavior which schools are designed to correct and to strive to eliminate. Today such behavior is condoned and too often held up as a legitimate sign of another, far from disgraceful "subculture" in our society. It is hard to deny the charge that during the 1960s and early 1970s many of the worst traits of the slums were introduced into our school systems, and not just ghetto school systems. This milieu is hard to defend as one which is more likely to foster scholastic achievement, good deportment or even pupils' (particularly girls') self-respect, including those from working class and middle class homes.

---

[*] _The New York Times_, January 28, 1974, p. 31.

[**] _The New York Times_, February 26, 1974, p. 41.

[***] The author sat with a suburban school board which wanted to soundproof school rooms because of noise from adjacent rooms. When asked how the children in the room originating such noise were supposed to learn, the superintendent said, "These are art rooms," etc., intimating that order in such areas was not expected.

The schools must bear the major responsibility for this recent development, but they were aided and abetted by many perhaps well meaning but also, from a broader viewpoint, perhaps sometimes ill-advised outside groups--for this was the period of the glorification of the "student activist."

> High school students are asking for greater participation in the operation and management of institutions affecting their lives and this should be welcomed.
>
> Educational leaders must take the initiative in convincing their profession and their community that student activism is potentially a constructive force compatible with basic democratic principles.*

---

*Student Activism in the High Schools of New York State: A Report to the New York State Commissioner of Education, March 1969, as quoted in the Student Rights Handbook for New York City, published by the Student Rights Project of the New York Civil Liberties Union, New York, 1969, p. 16.

Some educators and outside forces also made efforts to impress students that they had less to fear from school officials than some may have thought. In 1970 the Student Rights Project of the New York Civil Liberties Union produced and the New York City school system distributed to high school children the Student Rights Handbook.

This handbook lists the legal rights of law-abiding students and explains that teachers dare not harass or punish students from exercising these rights. But it also points out to students that they can take the fifth amendment with the principal: "You do not have to speak to school officials when charged with offenses."* The Handbook also advises, "Don't put anything in your locker or carry anything in your possession that you would not want the police to know about for any reason."** Parents of the majority of students might question the advisability of dispersing this kind of information to adolescents, particularly in light of the already difficult job of coping with malefactors in the New York schools.

As pointed out earlier, however, this was the awesome period when high school as well as college students often were assumed to be equal in knowledge, stability and judgment to parents and professional adults two or three times their age, even on issues so vital as the kind of education they would need in later life. (We all know parents and professionals in every area who have exercised bad judgment, but over all they are normally superior in this area to children. In any event, the evidence to date seems to indicate that the educators over the past decade who were wrong were probably those that subscribed to this "youth cult attitude."

---

*Student Rights Handbook for New York City, p. 13.

**Ibid., p. 14.

B. "Gimmickry," Social Engineering and Demography

Support of permissiveness has probably been responsible for as many changes in our school systems as other factors. This environment allows discipline to deteriorate so far that instruction often becomes difficult and sometimes impossible; brutal violence stalks a sizable majority of our schools. It is also largely responsible for the very low student-teacher ratio in core city schools. The more adults present, the better chance a teacher has of maintaining order, or at least of having help at hand if menaced or attacked by students. Obviously, teachers like the idea of low student-teacher ratio, and safety in the minority of rough schools is not the sole reason. First of all, a greater number of burly guards would be much more effective and much less expensive security, and second, teachers abound in many of the non-violent majority of schools too. The reason for this increase is not especially clear; we do know, however, that teachers have continually blamed the failure of schools on too few teachers, too small salaries, too old buildings, etc. In any event, in an effort to get quality education, schools systems have made changes which at least coincidentally make life easier for teachers--vast increases in teachers per fixed number of students, new buildings, etc.* This approach to quality education still predominates in many school districts, and whole states as well, though for years everyone who has looked at such

---

*See pp. 7 and 15.

"improvements" has realized both their questionable value, if not futility, in regard to pupils' academic achievement, and the crippling school costs they impose on harried taxpayers.

In 1971 Irving Kristol wrote:

> Whether a class has 20 pupils or 30 or even 40 simply doesn't matter. Students who do well in small classes will do well in large ones....This subject has been studied to death by generations of educational researchers, and the results are conclusive.*

Data from Arizona (see the Appendix) show again no correlation between reading skills and class size, per se. (In fact in this case, generally, the larger the class, the higher the reading achievement, with classes of forty to forty-five children doing best.)

Not only do the extensive samples available for years in the Coleman Report bear this out, but such local studies as the New York School Factbook (2d ed., 1972), prepared by the Institute for Community Studies of Queens College, City University of New York, also show similar results.

> We have recorded traditional variables that supposedly affect the quality of learning: class size, instructional costs, pupil/teacher ratio, condition of building, teacher experience and the like. Yet, there seems to be no direct relationship between these school measurements and performance. Schools that have exceptionally small class registers, staffed with experienced teachers, spend more money per pupil, and possess modern facilities do not reflect exceptional academic competence. P. iii.

The study further states:

> Nor has the More Effective Schools program--a saturation services compensatory education program of high cost--[as early as the 1967-1968 school year this program had some schools with a student-teacher ratio as low as 7.5 to 1 and an expenditure of $2,152 per student per year] shown any noteworthy results in this year's tabulations. Of twenty schools measured in the MES program, nineteen schools reported

---

*Irving Kristol, "A Foolish American Ism--Utopianism," The New York Times Magazine, November 14, 1971, p. 102.

> reading scores for 1971. All of these schools reported reading scores below grade level.

The study adds, "...we are faced with the question that the variables we have been accustomed to measure are not the ones that should be studied" (pp. iii and iv). It should be noted that the continuing emphasis on low student-teacher ratio is one of the chief reasons for the current extremely high school budgets and burdensome school taxes across the country. Furthermore, a lower student-teacher ratio often does not mean smaller classes in academic subjects even in the first through sixth grades. It often means additional teachers who take over the classroom teachers' chores in the non-academic areas (full time music, art and gym teachers and librarians in kindergarten through fourth grade schools, etc.), while the classroom teachers get one period a day away from pupils.

On another currently fashionable, often expensive, and sometimes from the students' viewpoint, disruptive practice, we read:

> Team teaching has now been used in enough places for long enough periods of time to have been given a fair trial. The results of studies on its effectiveness (Ginther and Strayer, 1962; R. W. White, 1964) reflect Stephens's spontaneous schooling theory; they indicate that academic performance of students who learn under team teaching circumstances is about the same as those who learn under other circumstances.*

Yet student-teacher ratios continue to be cut, team teaching installed, and old, proven methods discarded for new, questionable ones; the resultant taxes continue to soar to amazing levels.

Despite such expenditures there is, as we have seen, much evidence that schools were proving less than adequate as places where children including underprivileged children, could receive the traditional benefits of public education. Indications of the lengths to which deterioration of the public schools' ability to assist such people has progressed become evident when we examine the recommendations of educators and commissions set up to study the problem. Coleman, and later Brown, questioned the 50-year-old policy of keeping such children in school until they were 16. It is clear that much of this tendency toward abdication of a traditional responsibility is based on a presumed loss of ability to enforce the traditional behavior patterns in school, as well as an inability to teach these children. According to one educator, retaining children until 16 years of age "...carries a pretty large responsibility for the acting out [troublemaking] you get from a proportion of high-school students." The result of such attitudes has been a rash of "action learning" projects where students report (apparently often late and/or intermittently) to jobs outside school for several hours a week, for which they are given school credit.* We seem to have come full circle again, for this is almost identical with the "four and four" program (see pp. 125-126) implemented during the last academic achievement slump in the 1940s. There may be one function of high schools, however, on which all can agree:

---

*Robert F. Biehler, Psychology Applied to Teaching (Boston: Houghton Mifflin, 1971), p. 262.

> That brings us to what some teachers bluntly call the high schools' "baby-sitting function." It sounds crass, but at roughly $1 per hour per child the public schools are a baby-sitting bargain, with a gymnasium and a classroom education thrown in for free.**

---

*_The National Observer_, October 13, 1973, p.1.

**_Ibid_.

Unfortunately, it is hard to avoid the impression that in too many cases schools have deteriorated to this level under the innovative school program of the 1960s.

One fashionable implication (among educators), however, that the school discipline problem stems from the fact that today's "adolescent is more mature, larger, and more experienced that his parents and grandparents were,"* sounds less convincing to those of us who came from big pre-World War II high schools in large cities, or even not so large industrial and mining cities, where parents were likely to have sixth grade educations. In those mill and coal town high schools, football teams had lines which averaged 200 pounds per player, and boys left home in summer to search for and take jobs (when they could find them) which were much more complicated and demanding than those most of the current trouble-making minority of adolescents seem able to handle, even after they have graduated from high school. Nor is improper behavior, including illegitimate sex, the unique discovery of today's high schoolers. Pre-marital sexual relations, along with many other illicit activities (on and off school property) and all aspects of the many consequences to those engaging in them, were also well known by the really "streetwise" kids of yesteryear.

As pointed out, there have been changes in the student body and the areas served by schools in some districts (which will be discussed in the section "Parents, the Home Environment and Education"), but such changes are not adequate explanation for the discipline and teaching conditions in our schools. The emphasis on these changes, particularly those outside our core cities, may even be closer to a self-serving rationale, rather than a reason for poor instructional staff performance.

---

*The National Observer, October 13, 1973, p. 1, quoting a school superintendent from a suburban area.

This recent phenomenon of school boards more readily accepting excuses by administrators and teachers in lieu of doing what they are paid to do--teach children academic subjects and see that each pupil performs to the best of his ability--may constitute a large part of our current problems. If teachers and administrators are told to teach children to read, write and cipher, or to give a reason why they cannot, we should perhaps not be surprised if we create a generation of teachers and administrators which includes many with a distorted sense of priorities. It is much easier to eliminate the student requirement to take difficult (though important) subjects, or to offer excuses why children cannot be taught, than it is to teach them, or to relax rules of conduct than to make children behave, etc. In days gone by, except in the case of the small fraction of a percent of pupils who are always incorrigible and must be placed in special schools or correctional institutions, teachers were not allowed this luxury. They had to teach children, even if they had to stay after hours to help them keep up with the class: In essence, nobody told them that administrators or school boards would accept excuses why children could not be taught. And, as indicated earlier, they were successful with all kinds of children, from diverse backgrounds, at all IQ levels, with many or most of the children speaking as many as a half dozen different languages in a single classroom. Indeed, to repeat, teachers and administrators of such dedication can still be found in our schools today, but there seem to be far fewer of them, and the milieu is apparently much less conducive to this type of teaching.

What is disturbing, however, is the apparent low opinion of the pupil as an individual really held today by many progressive educators. Schools now seem to operate on the premise that current students are somehow less competent than those of old, that if we give these young people information they will not see analogies or know how to apply this knowledge to evaluation and decision making.

As indicated before, time and again we are told that students are being taught to think, a skill educators of old would have been reluctant to say their charges lacked and had to be taught. And the ingenuity, creativity, inventiveness and frequent brilliance their charges showed in later life when developing the modern era, seem to bear out their faith. Furthermore, one is prompted to ask how one teaches another to think, and how one knows when he has succeeded in such a task. Above all, how do we know that primary and secondary school teachers, who need only be able to transfer acquired knowledge to pupils to qualify for teaching positions, have the skills to teach another to think, even if we can define such a skill. Even granting that all the above questions can be satisfactorily answered, the evident lack of emphasis on information is still disturbing. It is difficult to see how these children are supposed to make judgments without the benefit of the wisdom of the ages and basic skills to help them. Nor, as we have seen, do these remarks apply only to the poorer products of our high schools. The greatest problems we have had with college students in recent years seem to have stemmed from the lack of information and basic skills. In attempting to follow the advice of "identity crusader" educators and become involved in "relevant" issues, either these students were led unknowingly to try to reinvent the wheel or reach conclusions about our current society, country and system with little, if any, knowledge about other eras, societies, countries and systems with which to make contrasts.

Furthermore, the point has been constantly stressed that revolutionary changes in the educational process are required because the learning a child receives in primary and secondary schools now must serve him in an unpredictable future technological age.* This strongly infers the following: first, that people do not learn after leaving school, so that school must predict and provide for all possible future student requirements, and second, that the old system, which during the jalopy and bi-plane era of the late 1920s and 1930s taught the fundamentals to students who put a man on the moon in the late 1960s, was somehow inadquate to prepare people for the future. Yet, as we have seen, coincidentally the ability to teach even the basics to large numbers of pupils in recent years seems to be inadequate.

During the sixties, at the same time that many innovations were introduced into the schools, including drastic curriculum changes, we began to expect results from schools in areas that we had never thought they were particularly competent to effect before. They were looked on as "magnets" of social engineering whereby "community action" could be developed for areas of adult responsibility, from correction of drug abuse to improvement in housing, etc.* Nationally they were looked on as an engine for racial integration.

---

*One is constantly amazed at the inability of educators with this attitude to empathize with educators of the 1930s and 1950s, who saw the same unpredictable technological future before them, but successfully educated people to cope with the future (as well as any people in the past) without undermining the fundamental educational process.

Clearly the standards for measuring the success of a school system had changed radically in the minds of many. Perhaps we should not have been too surprised, therefore, when schools were considered by educational administrators and other policy makers to be continually improving, although by traditional standards of student achievement in the fundamentals of reading, writing, arithmetic, grammar, history and geography, they evidently were not. These traditional standards seem to have been lost in the vast smoke, din and confusion of the "war on poverty," "the equal rights movement," and even the "anti-war movement." At the very least, many schools viewed their role as solving an identity crisis for children. "We made them feel a part of their community for the first time, a part of their school."** Alongside such objectives for our school systems, teaching children to read, write and cipher may seem insignificant, and worst of all, demanding, difficult and dull. (Perhaps a question asked about universities is applicable here: "whether the university [read school] is a place where the student seeks his identity or studies his lessons, the lessons of experts and professionals."***)

---

*Referring to the Anacostia Project in Washington, D.C.:

> Using the schools as magnets to bring the community together, it was hoped that local residents would go on to tackle other community problems, such as crime, drug addiction, dilapidated housing, and shortage of community services. Arnold, "Public Schools," in Levitan, ed., _The Federal Social Dollar_, p. 47.

**_Ibid._, p. 48.

***Shapiro, "Is This Really the Brightest Student Generation?"

Furthermore, shifting away from measurable criteria of achievement and indications of teacher competence obviously had a strong appeal for many of the less than highly dedicated educators in our system.

Another new aspect of our school systems is the downgrading of the neighborhood school. Mandatory cross-busing outside the south (where it was long in use but declared unconstitutional for segregation purposes) because of new grade grouping arrangements (e.g., neighborhood kindergarten through sixth or eighth grade schools have often been eliminated and the buildings used for "k through fourth" grade schools, "middle schools"--fifth and sixth grades, etc.) takes children past their former neighborhood school (now housing the wrong grades for them) and deposits them miles away in some other child's former neighborhood school. Economy drives and the decline in pupils due to the plummeting birth rate have closed down some schools and brought on new mandatory busing too, as usual with considerable parental objection.

A heated controversy continues on the effectiveness of busing for purposes of raising academic achievement of the underprivileged, or for improving pupils' attitudes toward racial integration.* Apparently there is not even agreement on a Hawthorne effect* in the first year for bused core city children.

---

*E.g., see the considerable statistical evidence of the failure of even voluntary busing programs in the north to achieve either goal in David J. Armor, "The Evidence on Busing," in Education Yearbook 1973-74 (New York: Macmillan Educational Corp., 1973) and the accusation by Thomas F. Pettigrew et al. in "Pierced Armor," an article reprinted from Integrated Education, November-December 1972, in Education Yearbook 1973-74, p. 60, that Armor not only demanded unreasonably high results but ignored equally voluminous and valid evidence (which is listed) that proves just as conclusively that busing programs are successful on both counts. Averch et al., after a considerable survey of the evidence available at the time, stated their conclusions in the Rand Corporation report How Effective is Schooling:

> There is no strong evidence that student-body effects exist. In particular, there is no evidence that the racial composition of a student body affects the performance of individual members of that student body. P. 43.

In any event, busing for racial balance continues on a massive scale and is expanding daily. *The Fleischmann Report* describes a vast racial desegregation program, with target districts indicated (v. 1, pp. 298-306) for New York State. Long-haul busing has been envisioned from the centers of large cities such as Detroit and even New York, to the suburbs and vice versa, to achieve racial balance.** The neighborhood school *district*, and other larger *regional* administrative arrangements, also could be affected by such plans. Such a scheme could have a

---

A recent survey of the south by the National Opinion Research Center, The University of Chicago, carried out for the U.S. Office of Education, reported the Negro boys who usually are the highest dropout risks have gained half a grade level in southern schools receiving Federal desegregation aid. The report said that black male students in high school had probably benefited more from an improved racial climate than superior instruction. The study also checked on Negro high school girls and fifth grade Negro boys and girls, but no such improvement was noted among these groups. (*Southern Schools: An Evaluation of the Effects of the Emergency School Assistance Program and of School Desegregation*, v. 2, Report No. NORC-R-124B, Chicago, Illinois, October 1973.)

U.C.L.A psychologist Harold Gerard has completed an extensive study which he believes demonstrates that five years of school busing in Riverside, Calif., has failed to benefit minority children, and perhaps even harmed them. *The Wall Street Journal*, March 7, 1974, p. 14.

*A significant improvement in output of workers in plants whenever they are made to feel that they are a special group under study, regardless of what change is made in their working conditions, adverse or otherwise. The name is derived from Hawthorne, New Jersey, the site of the plant where the phenomenon was first noted.

***The New York Times*, February 27,1974, p.1. Noting the Supreme Court decision pending at that time on the Detroit/suburb busing plan, the article said of a recent New York City Board of Education report to the State Board of Regents:

> ...the implication is that an exchange of pupils between city and suburban school districts emerges as a key way of continuing to provide the city with enough white pupils to carry out its integration program.

singularly disruptive and worrisome effect, if suburban children were to be bused into the permissive, lawless, dangerous, drug-ridden "core" areas of large cities from which many parents worked so hard to remove them. The recent Supreme Court decision which outlawed the Detroit-suburbia busing scheme has eliminated some momentum, but it remains to be seen if the long-haul busing movement has actually been halted.

The premise that "...the burden must fall upon those who support a given school integration program [and one should add any other "innovative" school program] to demonstrate that it has the intended effects (with no unintended, negative side effects)"* is, however, an idea whose time has evidently not yet come. In fact, one harsh but perhaps not completely unfair way to describe the 1960s and early 1970s might be the era of "gimmickry" in education. Many of the innovations which (often because of some undocumented, unmeasurable psychological effect) were supposed to accomplish with little scholastic effort what previously had taken considerable self-discipline and hard (sometimes tedious) work, seemed to fall into this category. It perhaps was inevitable that similar shortcuts were substituted for extremely complex social processes. Perhaps more surprising, their implementation was eagerly accepted by many educators who viewed themselves and the schools as the logical engines for such processes.

Another new factor in education is that school systems seem to be preoccupied with demographic data to a degree unusual since the first decades of this century. This apparently is primarily for purposes of attempting to balance the ethnic and racial groups (the reason for some busing), but there may be other implications, since it is stressed so often in connection with low achievement.* In 1948, before such groups became so vulnerable to the charge of racism, the Strayer study group, commissioned by Congress, stated in relation to District of Columbia schools what might preoccupy many educators today:

---

*Armor, "The Evidence on Busing," in Education Yearbook 1973-74, p. 56.

> The survey committee would suggest that there must be some factor other than instruction which may account in part for the downward trend of achievement in reading, numbers, language, and spelling as shown by these tests. It is perhaps the movement of a large number of underprivileged children into the District from areas where public education is very inefficient in the development of the fundamental tool skills.**

Present educators would be wise to start down this road cautiously, however, for most Negro boys and girls now in the schools of these northern cities are native northerners. There is still considerable difference in the achievement levels of southern-born Negro children attending schools in the north and west and Negro children native to these areas, but part of that may be due to the practice of starting children later in southern schools. Another factor cited is the lower level of education of migrant children's parents.*** More important, however, is not only the large percentage of the native-born majority who are below modal grade, but the large numbers who are promoted through the grades without learning. As we have seen, the figures on children below modal grade in the following table are considerably smaller than those on "retarded" immigrant children--those two years or more behind modal grade--in the 1908-1909 school year (pp. 115-118), and the drop in numbers of all children "kept back" in recent years has been sharp (pp. 83-87).

---

*E.g., The Fleischmann Report (v. I, pp. 307-427) goes into detail about the number of "White," "Black," "Spanish surnamed," "Indian and Oriental" pupils in every school district in the state; The New York Times (October 23, 1973) carries similar data released by the Board of Education for every school in New York City and the District of Columbia.

**As quoted in Arnold, "Public Schools," in Levitan, ed., The Federal Social Dollar, p. 25.

***Manpower Report of the President, April 1974, p. 97.

PERCENT OF BLACK CHILDREN LIVING IN THE NORTH AND WEST IN 1970 BY ENROLLMENT STATUS, AGE, ENROLLMENT BELOW MODAL GRADE AND REGION OF BIRTH AND RESIDENCE IN 1965

Residence and Age	Born in North	Born in West	Born in South				
			Total*	Moved out of South before 1965	Moved out of South since 1965		
					Total**	Moved from metropolitan areas	Moved from nonmetropolitan areas
Living in North in 1970			Percent not enrolled				
Children 6 to 8 years	4.3	3.6	5.0	5.4	3.9	3.7	3.7
Children 9 to 12 years	3.7	2.3	4.6	4.8	3.6	3.0	3.9
Children 13 to 17 years	10.8	9.8	16.2	14.9	20.4	15.7	22.7
			Percent enrolled below modal grade				
Children 9 to 12 years	21.7	19.6	28.2	26.9	31.0	26.4	33.7
Children 13 to 17 years	30.9	28.9	37.0	36.0	40.1	34.9	42.8
Living in West in 1970			Percent not enrolled				
Children 6 to 8 years	3.1	3.4	3.6	3.6	2.0	1.7	1.4
Children 9 to 12 years	3.1	2.7	3.0	2.7	2.8	2.4	3.2
Children 13 to 17 years	11.1	7.8	11.6	9.2	18.4	18.4	17.8
			Percent enrolled below modal grade				
Children 9 to 12 years	13.5	13.2	16.9	16.0	18.9	18.7	19.8
Children 13 to 17 years	17.4	18.2	22.0	19.6	32.2	29.7	36.0

*Includes persons not reporting state of residence in 1965.

**Includes persons reporting state but not county or city of residence in 1965.

Manpower Report of the President, April 1974, p. 96.

Despite this bad academic record, no educational system in the country pleads the innate inability of these children to learn the basics (though some very liberal educators come disturbingly close to it at times), and it certainly is not the argument the large sophisticated urban school districts used in the past, when they criticized the "hick" schools which parents and older brothers and sisters of these pupils attended.* They blamed pupils' poor academic achievement in these rural schools on the unqualified teachers (no college degrees), the antiquated methods, the "open classroom"--the little red school house, with six or eight grades ("tracks"?) in the one room, etc. Are we now saying that we cannot teach these children the fundamental tool skills in our multibillion dollar school program with its many very highly "qualified" (and paid) instructors, modern plants and methods, audio visual aids, school psychologists, family programs, etc..? This is the message that often seems to be conveyed. Furthermore, there is considerable evidence that traditionally Negro city schools in Harlem, Detroit, Washington, D.C., etc., did a far better job twenty to twenty-five years ago than they are doing today.** Is the cause "changing" Negro neighborhoods? Is it that IQs are so low that these children cannot even learn the simplest, most fundamental skills? Or is it lower

---

*Even in the immigrant period of 1908-1909, children who transferred into New York City schools from elsewhere in the United States were more likely to be behind scholastically than those who had been in the system from the beginning. U.S. Immigration Commission. Reports. V. 32: The Children of Immigrants in Schools. (S. Doc. No. 749, 61st Cong., 3d sess.) (Washington, D.C.: G.P.O., 1911).

**The New York Times,

standards in the schools? One fears the last factor must bear much of the blame. As we have repeatedly seen, declining academic achievement is not confined to the poor, the immigrants, the Negroes, or school districts where these children are found; it is a nationwide event. The achievement of solidly native, affluent districts with high average IQ students is falling rapidly. Furthermore, as we have seen, these children of immigrants, migrant Negroes and other minorities, simply are not numerous enough, and have not increased in number rapidly enough, to account for the decline in most states. For example, we noted earlier (pp. 99-101) the academic achievement decline in California, and even a drop in average IQ over the school years from 1969-70 through 1972-73 (see the Appendix by Paul J. Bracken). The change in ethnic composition of the school population, however, over this time period in this state was negligible.

MEAN PERCENTAGE OF SCHOOL ENROLLMENT
BY ETHNIC BACKGROUND, CALIFORNIA

	1969-70	1970-71	1971-72	1972-73
Negro	2.31%	2.36%	2.45%	2.45%
Oriental	.96	.94	.95	.95
Spanish	14.76	15.14	15.35	15.35

California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1974

(One also doubts that California was inundated with unintelligent, underprivileged children of other ethnic backgrounds during this time.)

As we have stressed so often, underprivileged children always have been with us, and the ethnic group which included the largest number of such students was often easily identified by accent, skin color, stature, surname, etc., but seldom have our northern city school systems made such an issue of identity. As we have seen, there may be reasons why the school environment of today's underprivileged children is unusual, but the most important differences may have little to do with ethnic origins. The same, as we shall see, might be said about their neighborhood and home environments.

As the school systems entered the 1970s, there were signs that disappointment with the trends in primary and secondary education of the 1960s (particularly education of the underprivileged), so obvious among many parents and a growing number of school administrators, might affect school policies. By the fall of 1971 it could be reported, "there is evidence that discipline has been tightened in public schools just as it has been in colleges and universities."[*] In December 1973, Mr. Anker, Chancellor of New York City schools, announced an end to the "automatic promotion" policy. Henceforth in order "to improve reading levels, pupils in the fourth through eighth grades will as a general rule not be promoted if they are more than a year behind grade level in reading." The new standards were designed to "help improve instruction by demanding greater pupil achievement."[**] (If enforced, the new rules will also, by definition, raise average reading achievement scores for these grades, e.g., if students may not longer enter the ninth grade reading at the sixth or fifth grade level, but now must read at least at eighth grade level, the average reading score for the ninth grade must go up.)

---

[*] George Gallup, "The Third Annual Survey of the Public's Attitudes Toward Public Schools," United Teachers Magazine, November 21, 1971, p. M-1.

[**] The New York Times, December 3, 1973, pp. 1 and 19.

As will be documented later, the vast majority of parents have long favored "tightening up" in our school systems, with emphasis on greater discipline and traditional academic achievement. Now educators seem to be slowly beginning to consider such tried and true methods as drill in multiplication tables, etc.,[*] to teach children, particularly those less fortunate. One hopes the discussion of these new/old programs indicates that we may soon reach the knee in the curve of our downward slide in the country's educationa; process. It remains to be seen if there are enough among current educators with the will and talent to halt the decline.[**] (With the decreasing student population, fewer new educators will be added and the attrition will be chiefly among retirees, so the current younger group of teachers and administrators will be the material with which the school system will have to work for some time to come.) If, however, their success depends on a sincere group of well wishers and supporters among parents and the public as a whole (as educators so often claim), one feels they could hardly be better endowed for this endeavor.

---

[*] See The New York Times, , 19 , for a description of such a trend in New York City; see also The New York Times, September 15, 1974, p. 15 E, for a similar trend in Palo Alto, California.

[**] There are those who say Mr. Anker's program of keeping students back until they can read near the grade level into which they are to be promoted has already broken down.

CHAPTER VI

PARENTS, THE HOME ENVIRONMENT AND EDUCATION

In the recent past there has been an increased emphasis on the importance of parents, the family, the home and neighborhood environment of students to scholastic achievement, and even their future economic status.

> In sum, what many of these analyses have shown, we believe, is that the schools reflect a deep-seated social problem that permeates almost every aspect of our society. This problem, in the main, is that a child's birth into a particular stratum of our social structure largely determines where he will and will not end up in the scheme of things. The problem is more than one of birth, however, because one's skin color and language habits tend to be associated with one's position in this social structure. It does not seem that the schools alone can rectify this problem, although they may play an ameliorative role. It seems more likely that the problem warrants a concerted attack in many different sectors of society (vis. jobs, housing, schooling, etc.).*

Statistically one may be able to justify the contention that the "stratum of our society" into which we are born "largely determines" where we will end up "in the scheme of things," particularly if that stratum is large enough. For example, the "working class" has always been larger than the "professional class," which means that: a) more children were born into the working class than the professional class; b) more jobs were available in the working class categories than professional categories. By definition, therefore, it would not be surprising if traditionally most people born into the working class were likely to remain in the working class. In addition because of normal parental instincts, people who can afford to send their children to college tend to do so, even if they are not brighter than some children from other families. This "nepotism" reaches to careers; a father who is a lawyer is likely to take his son into practice rather than advertise for a junior partner, etc. The latter factors tend to inhibit downward mobility as well as restrict upward mobility. Nor is this practice confined to the upper class. Skilled artisans are quite likely to pass on their knowledge of the trade (and support for union membership) to their interested offspring; entrepreneurs of all types take their sons into the business, etc.

---

*U.S. Department of Health, Education, and Welfare, A Study of the Achievement of Our Nation's Students, Publication No. (OE) 72-131 (Wash.: G.P.O., 1973), p. 147.

When one acknowledges all these factors, however, one finds that much of the blame for short-changing the intelligent, less fortunate child may still lie with the school. The facts mentioned above alone--that the "upper class" is smaller, its birth rate lower, that there is a growing demand in an expanding economy for a growing upper class--seem to indicate a continuing opportunity for upward mobility. The role of the school system is to equip those who are qualified among lower strata to use the opportunities for upward mobility which become available. The fact that all are unable is hardly relevant. Furthermore, in recent decades professions are expanding rapidly, and higher paid, more prestigious technical work is becoming available at a rate which makes even these old rules less relevant.

From the viewpoint of immigrant parents (today we still have approximately 10 million foreign-born residents) and even parents who are sons or daughters of at least one immigrant (about 23 million), a paragraph such as that quoted on page 181, written without caveats about the United States' unparalleled record of upward mobility for all classes and people, may express one of the most confusing aspects of education studies done in this country today. Of all the countries in the world, most foreign born and their offspring look on the United States as the nation where it is least likely that "a child's birth into a particular stratum of our social structure largely determines where he will and will not end up in the scheme of things." Heretofore, one felt it was the public school system which was looked to, largely to reduce (to the degree a child's ability permitted) the probability that he would fail to proceed upward socially and economically. Parents (both native born and immigrant) believed instinctively what the Statistical Abstract of the United States: 1973 seems to confirm (p. 118): schooling means upward mobility.*

MEAN INCOME OF MALES 25 YEARS OLD AND OVER
BY YEARS OF SCHOOL COMPLETED, 1968

Elementary		High School		College	
0-7	8 Years	1-3	4 Years	1-3	4 Years or More
$3,981	$5,467	$6,769	$8,148	$9,397	$12,938

U.S. Bureau of the Census, Statistical Abstract of the United States: 1973 (Wash.: G.P.O., 1973), p. 118.

---

*The question of whether this is because of people one meets at school or some other subtle reason (see Jencks, Inequality, pp.), even if true, is less easily understood and less relevant to the average person than the above figures.

Of course, realistically parents know we can't all be chiefs; that there must be more Indians than chiefs. But the question is, without simultaneously curing all the ills in many different sectors of society, can the Indian become a chief. In this country, the answer is traditionally yes. And he did, as current income and social levels of previously underprivileged, blatantly defamed, exploited minorities attest. In 1909, in seven large sample northern cities, Polish and southern Italian immigrant working men made less money than any other of the large identifiable groups of citizens, white or nonwhite, in our society, and Russian immigrant working men (primarily Russian Jews), the third large new immigrant category in that time period, were also far from the top of the income groups. Second-generation southern Italians and Poles were also low in income.

PERSONAL AND FAMILY INCOME BY GENERAL NATIVITY AND RACE OF INDIVIDUAL FOR NEW YORK CITY, CHICAGO, BOSTON, PHILADELPHIA, CLEVELAND, BUFFALO AND MILWAUKEE FOR 1909

General Nativity and Race of Individual	Males 18 yrs. and older	Females 18 yrs. and older	Male Heads of Families*	Percent of Families Having Income From		
				Wife	Children	Borders
Native-born of native father:						
White	$595	$278	657	16.0	21.9	14.4
Negro	441	207	465	64.2	9.5	32.4
Native-born of foreign father by race of father:						
Bohemian and Moravian	518	315	632	45.5	6.1	6.1
German	581	317	674	16.0	25.4	11.8
Hebrew	541	327	-	-	-	-
Irish	535	294	601	20.3	24.8	12.6
Italian South	413	270	-	-	-	-
Polish	403	211	-	-	-	-
Swedish	516	327	-	-	-	-
Foreign-born:						
Bohemian and Moravian	538	300	552	34.7	33.5	15.3
German	613	204	630	20.2	42.0	10.7
Greek	352	-	-	-	-	-
Hebrew, Russian	461	259	463	7.8	35.6	43.0
Hebrew, Other	465	230	484	12.1	34.2	31.5
Irish	535	213	557	12.6	41.9	17.5
Italian, North**	425	232	449	13.2	28.3	56.6
Italian, South	368	179	390	16.8	21.6	27.0
Lithuanian	410	191	419	6.5	8.8	77.3
Magyar	346	198	390	22.5	9.3	52.7
Negro	385	121	369	67.6	5.4	51.4
Polish	365	168	379	10.7	21.9	38.1
Servian	325	-	-	-	-	-
Slovak	384	208	402	14.6	14.9	44.8
Slovenian	398	-	433	.0	11.0	36.0
Swedish	692	221	703	20.4	36.3	42.5
Syrian	321	218	356	11.8	8.8	2.9
Grand Total	413	239	475	17.7	26.0	30.3
Total native-born of foreign father	526	292	625	20.6	23.1	11.8
Total native-born	533	275	612	26.8	20.2	16.5
Total foreign-born	385	219	452	16.1	27.0	32.7

*In 13% of the families, the husband contributed nothing to the family income.

**Northern Italians make up less than 4% of Italians in the sample.

U.S. Immigration Commission. *Reports*. V. 26: *Immigrants in Cities*. (S. Doc. No. 338, 61st Cong., 2d sess.) (Wash.: G.P.O., 1911), pp. 136-140.

Not only did these immigrants achieve within two generations levels of education equal to or higher than those of earlier immigrants and native Americans;* in the same time period those of Russian origin raised themselves economically to the very top of the income ladder, and the lowest groups in 1909, the Poles and Italians, held second and third place in 1970.

INCOME BY PERSONS 14 YEARS OLD AND OVER, 1970,
BY ETHNIC ORIGIN AND SEX, AND FAMILY INCOME
BY ETHNIC ORIGIN OF HEAD

	Total	German	Italian	Irish	French	Polish	Russian	English Scotch Welsh	Spanish	Other	Not Reported
Median Income											
Males	$6,665	$ 7,467	$ 7,883	$6,881	$6,775	$ 8,154	$ 9,160	$ 7,414	$5.477	$5.972	$6,013
Females	2,278	2,316	2,667	2,422	2,248	3,052	2,959	2,428	2,167	2,141	2,045
Family Median Income by Ethnic Origin of Head	9,891	10,402	11,089	9.964	9.558	11,619	13,895	10,727	7,379	9.630	8,676

U.S. Bureau of the Census, Current Population Reports, P-20, No. 249, April 1973, "Characteristics of the Population by Ethnic Origin: March 1972 and 1971" (Wash.: G.P.O., 1973), pp. 33 and 34

In 1962 one third of U.S. workers saw their children enter non-working class jobs (including entrepreneurial jobs) and white collar jobs, and though only about 30 percent of these entered the "professional and technical 'elite,'"** the process of upward mobility

---

*See pp. 102-163.

**Andrew Levison, The Working Class Majority (New York: Coward, 1974), pp. 121 and 122. Levison feels that since two thirds of workers "saw their children enter working-class jobs and many of the others saw only slight advances for their children, into clerical jobs or small, often marginal, businesses like franchise operations," and that since in 1962 "only 10 percent of the sons of manual workers...entered the professional and technical 'elite,'" there is "nothing even approaching a fair deal in education apparently continued. The rate of progress, though probably greater now than in 1962, as the author quoted indicates, probably should still not be deemed satisfactory; however the percentage of sons of that 10 percent of manual laborers' sons who entered the "elite" will follow their fathers' footsteps at a far greater rate than 10 percent, probably closer to 80 or 90 percent.

Today the need for basic schooling among the underprivileged is as great as it was in the last major immigrant era. It is true that today the overwhelming majority of children of these new arrivals in our large (and even smaller) cities speak English and are in a far less alien environment than were immigrants of old from foreign shores. But unless they are able to read the language and do basic ciphering, they are often virtually unemployable. Unlike the era of the last great immigration, there is less call for pick-and-shovel work in our society. Manual labor construction and industrial production jobs have been declining for years, and in our growing service industry-oriented economy, the gap between types of available jobs is great, and is directly related to education. Service-type jobs for the uneducated are not only fewer and generally ill paid, but often very menial--garbage men, floor swabbers, septic tank cleaners, etc. For the educated, however, service-type jobs can range from communications and transportation workers to computer operators. Ditch-diggers no longer are required-- backhoe operators are, but they must be able to read the operator's manual and often pass operator's tests. The latter types of service jobs require a knowledge of the fundamentals--reading, writing, arithmetic, etc.

---

for the young blue-collar workers." Even with the increased opportunities since 1962, he still feels this is true and the "The statistics on mobility bear out the failure of the schools."

As stated earlier, that is the underlying philosophy of the American public school system--to smooth the path upward for the underprivileged--and it is in this area that parents seem to fear the school system has been recently failing.

In recent years, parental concern for children's welfare and achievement in school, which educators seem to feel is so important for students' progress,* was quite evident in public opinion polls.

QUESTION: "Which three of these educational programs would you like your local elementary schools (grades 1-6) to give more attention to?":

1. Teaching students the skills of reading, writing and arithmetic.
2. Teaching students how to solve problems and think for themselves.
3. Teaching students to respect law and authority.
4. Teaching students how to get along with others.
5. Teaching students the skills of speaking and listening.
6. Teaching students vocational skills.
7. Teaching students health and physical education.
8. Teaching students about the world of today and yesterday (that is, history, geography and civics).
9. Teaching students how to compete with others.

Gallup Opinion Index, No. 87, September 1972, p. 18.

---

*A Study of the Achievement of Our Nation's Students, p. 145.

Respondents were then asked the same question in relation to junior and senior high schools (grades 7-12). In order of mentions:

1. Teaching students to respect law and authority.
2. Teaching students how to solve problems and think for themselves.
3. Teaching students vocational skills.
4. Teaching students how to get along with others.
5. Teaching students the skills of speaking and listening.
6. Teaching students about the world of today and yesterday (that is, history, geography, and civics).
7. Teaching students the skills of reading, writing, and arithmetic.
8. Teaching students health and physical education.
9. Teaching students how to compete with others.

Gallup Opinion Index, No. 87, September 1972, p. 18.

In addition to such survey data, much anecdotal evidence indicates that parents want children taught the basics rather than having progressive education be the rule, e.g.,

> ...I was well aware of the legitimate demands in the black community for results in the three Rs. I knew that the suspicion of white liberals "experimenting" with black children was such that I could not afford to be accused of dillydallying around with a "permissive" classroom that did not have very visible and effective effort to teach the basic skills needed to get kids into high school and college. I simply couldn't tell a parent that the development of her child's soul in an idealistic "open classroom" was more important....*

Traditionally adults are also in favor of orderly schools, and poll data over the past twenty years have borne this out.** Feelings remain basically unchanged.

---

*Kim Marshal, Law and Order in Grade 6-E (Boston: Little, Brown, 1970), p. 39. Mr. Marshal, a white Harvard graduate, was a teacher in a heavily Negro school in Roxbury, a Boston suburb.

**See The Gallup Poll: Public Opinion 1935-1971, 1st ed., 3 vols, (New York: Random House, 1972), v. 2, 1949-1958, pp, 1281, 1282, 1364, 1514, 1581, 1582; v. 3, 1959-1971, pp. 1587, 1612, 1715, 1791-1792.

DISCIPLINE IN THE LOCAL PUBLIC SCHOOLS

QUESTION: "How do you feel about the discipline in the local public schools--is it too strict, not strict enough, or just about right?"

National	Too Strict	Not Strict Enough	Just About Right	Don't Know/ No Answer
Sex				
Men	2%	54%	31%	13%
Women	2	52	31	15
Race				
White	2	52	32	14
Nonwhite	4	62	21	13

Gallup Opinion Index, No. 66, December 1970, p. 17.

One should note that more adult Negroes (62 percent) than whites (52 percent) feel discipline in local public schools is not strict enough, while those who think it too strict are statistically insignificant (4 and 2 percent respectively).

Furthermore, though these parents and other adults were (and certainly still are) very interested in achievement, they were unwilling to accept the local educators' opinion of their children's achievement.

NATIONAL TESTS IN LOCAL SCHOOLS?

QUESTION: "Would you like to see the students in the local schools be given National Tests so that their educational achievement could be compared with students in other communities?"

	National Totals	No Children in School	Public School Parents	Parochial School Parents	High School Juniors and Seniors
Yes	75%	74%	75%	80%	76%
No	16	14	19	15	23
No Opinion	9	12	6	5	1
	100	100	100	100	100

Gallup Opinion Index, No. 87, September 1972.

Parents and the rest of the public are so concerned with progress that they want to hold school staffs responsible.

THE ACCOUNTABILITY OF THE SCHOOL FOR STUDENTS' PROGRESS

QUESTION: "Would you favor or oppose a system that would hold teachers and administrators more accountable for the progress of students?"

	No National Totals	No Children in School	Public School Parents	Parochial School Parents	High School Juniors and Seniors
Favor	67	66	68	71	65
Oppose	21	21	21	19	29
No Opinion	12	13	11	10	6

Gallup Opinion Index, No. 66, December 1970, p. 18.

HOW SHOULD TEACHERS BE PAID?

QUESTION: "Should each teacher be paid on the basis of the quality of his work or should all teachers be paid on a standard scale basis?"

	National Totals	No Children In School	Public School Parents	Parochial School Parents	High School Juniors and Seniors
Quality of Work	58%	57%	61%	52%	59%
Standard Scale Basis	36	36	35	43	39
No Opinion	6	7	4	5	2
	100	100	100	100	100

Gallup Opinion Index, No. 66, December 1970, p. 18.

Apparently many teachers were unlikely to be amenable to this achievement testing and evaluation approach. "In practice, the growing movement has often provoked teachers' fears that they will be held accountable if their pupils fail to progress." A spokesman for the New Jersey Education Association (a teachers' lobby) gave the following reason, among others, for opposing the release of achievement test scores to the public: "The results of a testing program will eventually enable the authority to reward those who do his bidding and punish those who do not conform."*

Parents also frown on a tenure system which largely puts the teacher out of reach of administrators' and school boards' dismissal power.

---

*

TENURE FOR TEACHERS?

QUESTION: "Many states have "Tenure" laws which mean that a teacher cannot be fired except by some sort of court procedure. Are you for giving teachers tenure or are you against tenure?"

	National Totals	No Children In School	Public School Parents	Parochial School Parents	High School Juniors and Seniors
For	35%	38%	29%	28%	30%
Against	53	48	60	62	61
No Opinion	12	14	11	10	9
	100	100	100	100	100

Gallup Opinion Index, No. 74, August 1971, p. 27.

TEACHER TENURE

QUESTION: "Most public school teachers have tenure; that is, after a two- or three-year trial period, they receive what amounts to a lifetime contract. Do you approve or disapprove of this policy?"

	National Totals	No Children In School	Public School Parents	Private School Parents	Professional Educators
N =	1,790	996	698	144	270
Approve	28%	28%	27%	28%	53%
Disapprove	61	59	64	63	42
No Opinion	11	13	9	9	5
	100	100	100	100	100

Gallup Opinion Index, No. 87, September 1972, p. 23.

MAJOR PROBLEMS CONFRONTING THE PUBLIC SCHOOLS IN 1972

...What do you think are the biggest problems with which the public schools in this community must deal?...

1. Lack of discipline
2. Lack of proper financial support
3. Integration-segregation problems
4. Difficulty of getting "good" teachers
5. Large school, too large classes
6. Parents' lack of interest
7. Lack of proper facilities
8. Poor curriculum
9. Use of dope, drugs

...The professional educators interviewed in this same survey regard school finances as the number one problem, followed in order by integration/segregation, discipline, parents' lack of interest, quality of teaching, curriculum, use of dope and drugs, and lack of proper school facilities.

...The question of "student rights" was probed in the present survey. The question:

> Generally speaking, do the local public school students in this community have too many rights and privileges, or not enough?

The general public replied:

Too many	41%
Not Enough	11
Just Right	33
No Opinion	15

Since 18-year-olds now have the right to vote, the question has arisen as to whether, as full-fledged citizens, they should not have more rights than other students. The public says "No" in resounding fashion. The question:

> Should students who are 18 years of age, and now have the right to vote, have more rights and privileges than other students?

Yes	21%
No	73
No Opinion	6

Gallup Opinion Index, No. 87, September 1972, p. 17

There is also much evidence that people favor their children attending schools close to home. A Pennsylvania hinterland school superintendent, after closing five schools ranging in size from one to four rooms in favor of a new, centrally located school, due to a dip in enrollment, encountered heated parental opposition: "All those coal miners want a school near their homes."* Nor is this merely the attitude of people with "a small town mentality"; the school board in East Ramapo, a "bedroom" area for New York City, experienced parental opposition when two neighborhood schools were to be closed for the same reason.** (Parents have been known, however, to support voluntary busing to what they feel are superior schools away from local neighborhoods: "...black parents stressed quality of education as the most important benefit of such programs [busing of core city Negro pupils to suburban schools]...."*)

---

*The New York Times, March 5, 1974, p. 29.

**The Journal-News, Rockland County, New York, March 18, 1974, p. 1 B.

Of course, as mentioned earlier, the effort to achieve racial balance has affected neighborhood schools too and caused mandatory busing and cross-busing in areas where it was unknown previously, again with continuing opposition. A National Opinion Research Center survey in the spring of 1974 showed 72.9 percent opposing busing, 82.2 percent of whites and 36.9 percent of Negroes. (The same survey showed that 73 percent of whites had no objections to sending their children to integrated schools--presumably neighborhood schools.)

---

*Armor, "The Evidence on Busing," in Education Yearbook 1973-74, p. 51.

BUSING OF SCHOOL CHILDREN

QUESTION: "In general, do you favor or oppose the busing of Negro and white children from one school district to another?"

	Favor		Oppose		No Opinion	
	8/71	10/71	8/71	10/71	8/71	10/71
National	19%	17%	73%	77%	8%	6%
Sex						
Men	20	16	73	78	7	6
Women	17	17	74	77	9	6
Race						
White	16	14	76	80	8	6
Non-white	43	45	46	47	11	8
Education						
College	23	22	72	75	5	3
High School	17	15	75	79	8	6
Grade School	17	17	70	75	13	8
Occupation						
Professional and Business	21	18	74	78	5	4
White Collar	19	16	74	76	7	6
Farmers	11	15	78	75	11	10
Manual	19	17	74	77	7	6
Age						
18-20 years	32	28	64	63	4	
21-29 years	25	23	69	73	6	
30-49 years	17	17	76	78	7	
50 and over	15	12	74	81	11	
Religion						
Protestant	15	15	78	80	7	
Catholic	18	19	71	74	11	
Jewish	x	x	x	x	x	
Politics						
Republican	11	10	81	83	8	
Democrat	23	12	70	74	7	
Independent	17	17	74	77	9	
Region						
East	22	18	68	76	10	
Midwest	17	17	74	75	9	
South	15	10	79	87	6	
West	22	25	69	68	9	
Income						
$15,000 and over	21	16	73	79	6	
$10,000-$14,999	18	19	75	75	7	
$ 7,000-$ 9,999	21	15	72	81	7	
$ 5,000-$ 6,999	15	17	76	76	9	
$ 3,000-$ 4,999	19	15	66	77	15	
Under $3,000	17	23	73	72	10	
Community Size						
1,000,000 and over	23	25	71	69	6	
500,000-999,999	17	17	74	79	9	
50,000-499,999	21	15	71	81	8	
2,500-49,999	18	15	71	78	11	
Under 2,500, Rural	14	14	77	79	9	

Gallup Opinion Index, No. 75, September 1971, p. 20
Gallup Opinion Index, No. 77, November 1971, p. 24

QUESTION: "Do you favor busing of school children for the purpose of racial integration or should busing for this purpose be prohibited through a constitutional amendment?"

	Favor %	Prohibit %	Don't Know No Answer %
National	18	72	10
Sex			
Men	19	73	8
Women	18	71	11
Race			
White	15	75	10
Nonwhite	40	47	13
Education			
Elementary	21	70	9
High School	15	75	10
College	22	67	11
Age			
18 to 29 years	22	67	11
30 to 49 years	16	74	10
50 years and over	18	72	10
Religion			
Protestant	16	75	9
Roman Catholic	19	70	11
Jewish	21	68	11
All others	30	55	15
Region			
East	17	70	13
Midwest	18	74	8
South	20	73	7
West	17	70	13
Political affiliation			
Republican	13	78	9
Democrat	22	69	9
Independent	16	72	12

Gallup Opinion Index, No. 119, May 1975, p. 27

A 1972 survey by the National Opinion Research Center for the U.S. Commission on Civil Rights asked a somewhat more restricted question about busing where "courts have found unlawful segregation," etc. (For example, much busing these days is for "racial balance," involving neighborhood schools which have not even experienced _de facto_ segregation, for they have some Negro children already in attendance. The term "unlawful" in the survey question may eliminate in many people's minds their own school district's procedures, etc.) The question and results were as follows:

> In areas where the courts have found unlawful segregation of white and black school children the courts have ordered desegregation, including busing where necessary, so that whites and blacks will not be kept from attending school together. Do you favor or oppose such busing?

Favor	Oppose	No Opinion
21%	70%	9%

U.S. Civil Rights Commission, _Public Knowledge and Busing Opposition: An Interpretation of a New National Survey_, March 1973, Appendix I, p. 1

It still seems as though busing for any reason (except perhaps to transport children to a superior school) has not appealed to the population as a whole, and according to one report, many well-educated Negroes, formerly active proponents of busing, now doubt its value. They and Negro groups such as Atlanta's chapter of the N.A.A.C.P. have discontinued their support.*

There seems to be a vast amount of interest, however, among parents of every race, religion, income level, region and occupation in the

---

*_The New York Times_, July 14, 1974, p. 7.

QUESTION: "Do you favor busing of school children for the purpose of racial integration or should busing for this purpose be prohibited through a constitutional amendment?"

	Favor %	Prohibit %	Don't Know No Answer %
National	18	72	10
Sex			
Men	19	73	8
Women	18	71	11
Race			
White	15	75	10
Nonwhite	40	47	13
Education			
Elementary	21	70	9
High School	15	75	10
College	22	67	11
Age			
18 to 29 years	22	67	11
30 to 49 years	16	74	10
50 years and over	18	72	10
Religion			
Protestant	16	75	9
Roman Catholic	19	70	11
Jewish	21	68	11
All others	30	55	15
Region			
East	17	70	13
Midwest	18	74	8
South	20	73	7
West	17	70	13
Political affiliation			
Republican	13	78	9
Democrat	22	69	9
Independent	16	72	12

Gallup Opinion Index, No. 119, May 1975, p. 27

A 1972 survey by the National Opinion Research Center for the U.S. Commission on Civil Rights asked a somewhat more restricted question about busing where "courts have found unlawful segregation," etc. (For example, much busing these days is for "racial balance," involving neighborhood schools which have not even experienced de facto segregation, for they have some Negro children already in attendance. The term "unlawful" in the survey question may eliminate in many people's minds their own school district's procedures, etc.) The question and results were as follows:

> In areas where the courts have found unlawful segregation of white and black school children the courts have ordered desegregation, including busing where necessary, so that whites and blacks will not be kept from attending school together. Do you favor or oppose such busing?

Favor	Oppose	No Opinion
21%	70%	9%

U.S. Civil Rights Commission, Public Knowledge and Busing Opposition: An Interpretation of a New National Survey, March 1973, Appendix I, p. 1

It still seems as though busing for any reason (except perhaps to transport children to a superior school) has not appealed to the population as a whole, and according to one report, many well-educated Negroes, formerly active proponents of busing, now doubt its value. They and Negro groups such as Atlanta's chapter of the N.A.A.C.P. have discontinued their support.*

There seems to be a vast amount of interest, however, among parents of every race, religion, income level, region and occupation in the scholastic achievement of their children, based perhaps on increased opportunity for upward economic and social mobility.

---

*The New York Times, July 14, 1974, p. 7.

QUESTION: People have different reasons why they want their children to get an education. What are the chief reasons that come to your mind?

1.	To get better jobs	44%
2.	To get along better with people at all levels of society	43
3.	To make more money--achieve financial success	38
4.	To attain self-satisfaction	21
5.	To stimulate their minds	15
6.	Miscellaneous reasons	11

Gallup Opinion Index, No. 87, September 1972

In a Roper Poll taken a few years ago in Louisville, Kentucky, 79 percent of Negroes and 79 percent of whites felt "the favored way to Negro progress" was to "get more education."*

We find that, as indicated earlier, there seems to be some disapproval of the situation under the old school systems where, from the parents' and students' viewpoints, education was something "practical and ornamental" to be used to better one's station in life.** Yet we find on page 146 of the HEW study mentioned earlier,

> But under what conditions are parents likely to engage in educationally related child-rearing activities? A study by J. M. Garza (1969) suggests that when parents perceive

---

*Jean Heinig, "A Tale of Two Cities," *The Public Pulse*, April 1970.

**Thayer and Levit, *The Role of the School*, pp. 125-126. Used by permission of Dodd, Mead & Company, Inc.

> opportunities for their child to obtain a better life through education, then they will be more prone to engage in such activities. These, in turn, translate into motivation for achievement.*

Apparently if a child appears smart, parents expect him to do well. If a child does not seem to have the tools necessary to excel, parents may be reluctant to push him in areas he might not be able to deal with sucessfully. On the other hand, it is likely that many parents will help a child more if they think he needs it.**

Apparently, however, it was felt that this parental interest had to be coupled with a certain type of involvement;

> We concluded, then, that the crucial factor in achievement was not so much the presence or absence of parents or parental surrogates as the nature of their involvement in the educational process.

Furthermore, success in this specific type of involvement seemed to be related to skin color:

> However, economically depressed nonwhites find it harder to overcome the effects of their low status by such means than do economically depressed whites. In this sense, the outputs of schooling are the inputs of society.***

This guides us toward some questions regarding parents and home environment which, though basic, may not be as relevant to education issues as some seem to think. It apparently is not clear what determines the probability of children of greater talent being found in one socio-economic group rather than another, environmentalists notwithstanding. As mentioned earlier, one should not be surprised if in an affluent society with an expanding economy, the probability that people with incentive and higher IQs will remain poor is relatively low. Certain elements, such as prejudice, can change the situation somewhat, but generally speaking in a booming economy and expanding job market, those with talent, particularly those who are willing to relocate in order to work, will not remain poor.

---

*A Study of the Achievement of Our Nation's Students, p. 146.

**Ibid.

***Ibid., p. 14.

> The ability to move upward in occupation or status, having narrowed during the depression of the 1930's, broadened dramatically after 1950. No one ever expected rags to riches; but the hope of a climb, step by step, increasingly was open to fulfillment by all.*

As one would assume, the offspring of a group of relatively high IQ parents are more likely to be above average IQ and vice versa. There is a positive correlation between the levels of skill required by specific jobs and the mean IQ levels of children of fathers holding these various jobs,** which probably reflects not only the father's IQ, but the fact that assortative mating in this country draws like IQ men and women to each other to a degree which assures closer IQ ratings between husbands and wives than between siblings.*** When we look at the IQ and/or achievement levels of lower middle class students as a group, the lower "competence" of the last group is borne out.**** Many educators are likely to stress the home environment, rather than the differences in mean IQ among groups of parents, when discussing the differences among pupils from differing socioeconomic groups. As mentioned earlier, "for years...teacher training institutions...and almost all writers...on the 'culturally deprived'...have taken a fairly uniform stance on the environmentalistic side" of the discussion.* In the case of "middle-class white populations, investigators have reached the conclusion that genetic variability accounts for about 75 percent of the total variance in IQ scores...."** But among disadvantaged groups, "Carriers of genetic endowments who could unfold high IQs under favorable conditions will fare no better than genetically less well endowed people in suppressive environments."***

---

*Handlin, The Uprooted, p. 294.

**Herbert Ginsburg, The Myth of the Deprived Child (Englewood Cliffs, N.J.: Prentice-Hall, 1972), p. 23, table 2-1, "Mean Stanford-Binet I.Q.s of 2,757 Children Classified According to Parental Occupation" (McNemar, 1942, p. 38).

***Jensen, Genetics and Education, pp. 110 and 107.

****Ginsburg, The Myth of the Deprived Child, p. 25, table 2-3, "Race and Class Difference in I.Q. Scores" (Deutsch and Brown, 1964, p. 26).

Determining exactly what underprivileged homes and neighborhoods are supposed to have done, or not done, to or for these students is difficult. And though it might be true that for some reason "economically depressed nonwhites find it harder to overcome the effects of their low status by [involvement of parents in the educational process] than do economically depressed whites,"**** it is not at all clear that Negro parents or neighborhoods have impressed their children with their youngsters' inherent "low status." Nor is it clear their schools in the past have had this effect. In a study of tenth grade boys, researchers found results "...surprising; black males score noticeably higher than whites on our self-esteem scale, and when adjustments are made for other background factors the difference becomes larger."* Furthermore, as we have seen, adult Negroes, as much or more than whites, indicate a desire for the schools to "take charge" of children and school them in the fundamentals. If "involvement in the educational process," however, means that the Negro (or white) father should teach his child at night what a teacher failed to teach him during the day, a different problem becomes apparent. Lower middle class fathers often "moonlight" on a second job, work twelve-hour days, arrive home at 10 or 11 P.M.; most mothers of school children now also work. Many of those who do not work are busy with several children, frequently under six years old.** It seems wrong somehow that such a mother or father must do at night the job of a teacher, who for four hours' work earned two or three times what he did that day. It is doubly galling since the teacher is paid with the father's hard-earned money, taken from him in excessively high school taxes (which show up in rent costs as well). The questionable reasoning behind such expectations of "involvement" seems clear.

---

*Wilson et al., "Education of Disadvantaged Children," p. 36.

**Theodore Dobzhansky, Genetic Diversity and Human Equality (New York: Basic, 1973), p. 23, quoting Scarr-Salapatek (1971 a, b).

***Ibid., p. 22.

****A Study of the Achievement of Our Nation's Students, p.

Furthermore, professional educators consider that homes and parents in general, in particular those of low class and lower middle class, here (and in other countries) have traditionally been inadequate as teaching institutions. This is one reason why tax-supported public education was introduced. It is a strange concept, therefore, if a large part of the responsibility for teaching children to read, write, spell, do mathematics, etc., is thought to rest with the parents (rich or poor) and the home rather than with our $60 billion a year primary and secondary school system. Unfortunately it is becoming apparent that too often this is what educators infer, and equally unfortunate, too often it is the hard-working mothers and fathers (tutors when they can be afforded) who teach their children at home what teachers fail to teach them in school. This, however, does not necessarily prove the absolute adequacy of these parents to do what educators have heretofore insisted parents could not do; it could indicate only a relative ability to teach children measured against the present observable inability of many of our current public and private schools. Nor is this inability confined to slow learners; the experience of bright children is the same. This is a particularly difficult situation for parents with inferior education.

---

*Jerald G. Bachman, The Impact of Family Background and Intelligence On Tenth-Grade Boys (Youth in Transition, v. 2) (Ann Arbor, Mich.: Institute for Social Research, University of Michigan, 1970), p. 128.

**50.1% of married women, with husbands present, and with children between six and seventeen years of age, now work. Of the fourteen percent of the female work force who are widowed or divorced, many too have school-age children. Statistical Abstract of the United States: 1974, p. 341, table 552 and p. 340, table 550.

On the other hand, it is often not quite so clear that educators want parents to become involved in what the schools are doing academically for and to their children. As any interested parent can testify, there had been a growing tendency in recent years to dissuade adults (parents and nonparents) from interest in results of standardized pupil scholastic achievement tests. When parents do evidence interest in (and dissatisfaction sufficient to contact teachers about) children's classroom progress, they are often told not to "put so much stress on pupil's grades." Since test scores and grades are the only indicators of how the school and their children are performing, parents cannot really become involved, at least not beyond rubber stamping what teachers arbitrarily decide, without this information.

In fact, as indicated earlier, a growing number of parents who are truly concerned with their children's education and who have a knowledge of what children should learn, find themselves in prolonged family unpleasantness, in part because teachers with ever-decreasing standards support the children in opposition to parents' demands for greater efforts on school work. Schools today commonly reinforce many a talented youngster's tendency to do as little as possible, instead of supporting the wishes of the involved parent by urging the child to work to his full potential as schools used to do. Furthermore, although it is fashionable for educators to stress constantly how much effort and money parents owe their children (and the school system) to further children's education, virtually no mention is made of what students owe parents for the unending, tension-filled, cardiac-causing labor and effort, on and off the job, to obtain for their children the best education possible. On the contrary, in the recent past educators have been more likely to condone the idea that such parents, as members of the "establishment" (including blue collar workers, particularly if unionized) are hypocrites--cold, even heartless, selfish, and anything but honest.* Nor is this phenomenon confined to upper middle class schools; the widening myth of the "generation gap"* was fostered in working class and "slum" schools as well.

---

*The author knows a very hard-working man of exceptional talent, who pulled himself up by his own bootstraps from a person on relief during the Depression to a point where he can now raise his children in an area and send them to the kind of school he could only dream about previously. A few years ago, after flying all night to arrive in time to attend his oldest child's high school graduation, he sat through the valedictorian's speech

A. A "Then and Now" Study of the Homes and Parents of the Underprivileged

As we have seen, there is no evidence that parents in general are less concerned with the education of their children these days than previously--on the contrary. Even among the underprivileged of this country today there is no irrefutable evidence that parents in the standard nuclear family are any less knowledgeable about the subtleties of the educational process, or are any less qualified by social and educational background to become involved than were the newly arrived Polish and Italian peasants and Russian serfs whose children flooded the schools of the 1890s and early 1900s.

Between 1868 and 1910, 21.5 million immigrants came to America. By 1905 they were arriving at the rate of one million a year, and the percentage of immigrants from Northern and Western Europe had shrunk to 19.4 percent (from 92.5 percent in 1868), while those from Southern and Eastern Europe increased to 70.9 percent of the total (from 1.3 percent in 1868).** (In 1920 13.2 percent of our population was still made up

---

about how rotten, hearless and evil was the establishment," to which the parents in the audience, of course, belonged.

*For a discussion of the nongeneration gap between parents and high school pupils and supporting data, see Frank Armbruster, The Forgotten Americans: A Survey of the Values, Beliefs and Concerns for the Majority (New Rochelle, N.Y.: Arlington House, 1972), pp. 174, 175 and 190.

**U.S. Immigration Commission. Reports. V. 3: Statistical Review of Immigration, 1820-1910. (S. Doc. No. 756, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), pp. 6, 7, 10 and 11.

of immigrants, 15 percent of sons and daughters of immigrant parents, and 6.5 percent of people with one immigrant parent.*)

Though it is rarely mentioned, the general physical home environment of current school children is on the whole the best in our history. The affluence of our society relative to societies of the past extends to the lowest families in the land. As great as the contrast is today between the poor and their more affluent fellow citizens and badly as improvement in their lot is needed, it cannot compare to the circumstances of the earlier underprivileged.

> (In all, the 312,000 residents [of New York] of 1840 had become 3,437,000 in 1900.) Chicago's rise was even more precipitate; the 4000 inhabitants there in 1840 numbered 1,700,000 in 1900. Every ten-year interval saw two people struggling for the space formerly occupied by one.**

Such crowding led to conditions where, in New York in 1853, five hundred people lived in one barrack building 150 feet long and five stories high. In this building each family had a two-room "apartment," one room nine by fourteen feet, one nine by six, "without interior plumbing or heat." Ten years later, when the building had "more than eight hundred dwellers," there was installed "for the service of the community, a row of privies in the basement, flushed occasionally by Croton water." This building "continued in use till the very end of the century."*** Later tenements had common water closets on the upper floors, but "from one hundred and fifty to two hundred human beings" lived in a building twenty to twenty-five feet wide, ninety feet long and six to eight stories high. One block on a street of such tenements housed 4,000 people.* Open sewers were common. (Chicago's "Bubbly Creek wended its noisome way aboveground until well into the twentieth century.") "Not till late was city water directly connected with the toilets; it was later still to reach the kitchen sink; and bathrooms had not yet put in an appearance in these quarters." Everything was in disrepair: "the rain comes through the ceiling, the wind blows dirt through the cracks in the wall." People tried to divide their tiny crowded domains with calico sheets hung on ropes for some privacy.** According to The New York Times, January 1895, though "New York, including the thinly populated annexed district, ranks sixth [in population density]....New York below the Harlem has a greater density per acre than any other city in the world--143.2 per acre." The article further stated that "The entire population of the tenements in 1893...was 1,332,773 persons living in 39,138 houses, out of an entire estimated population of 1,891,306." In these neighborhoods, up to "nearly 93 percent of the total area" was covered with buildings, "and a total average for thirty-four blocks showed 78.13 [percent] of the area built upon."*** Nor, as indicated, were these the worst conditions to which pupils returned from school. Even outside the big cities, dismal rows of coal and iron "company houses" set against slag heaps on mud ruts housed hundreds of thousands of non-English-speaking parents and their many children.

---

*Statistical Abstract of the United States: 1973, p. 34.

**Handlin, The Uprooted, p. 145.

***Ibid., p. 148.

---

*Handlin, The Uprooted, pp. 149-150.

**Ibid., pp. 151 and 153.

***Schoener, ed., Portal to America, pp. 210-212.

Such homes (in which was heard only Hungarian, Italian, Polish, Russian, Yiddish, etc.) had no books, no writing paper, no pencils, no quiet--only sickness, endless toil and malnutrition.

In 1895 The New York Times ran an article which stated "On June 1, 1890...of the 1,489,627 whites in New York, 636,986 were foreign born; that is, 42.8 percent....At the same date 76.2 percent had foreign-born mothers."* In 1909, 72 percent of New York City's population was first- or second-generation immigrant** as was 72 percent of its school population*** and English was not spoken in 53 percent of its homes.**** Over the years, there were drunkenness, roaring family arguments and fights, epidemics, wars and rumors of wars, and political graft and corruption on local, state and federal levels, the like of which is almost inconceivable today. Finally, the Great Depression of the 1930s caused want and misery to reach a level, scale and duration which makes the economic plight of our underprivileged today seem mild by comparison.

Yet the public school system did not seem to comprehend these as reasons to abdicate its responsibility to educate children; it seemed to cope with the problem for which it was designed. As we have seen, there is no evidence of widespread illiteracy among the twelve-year-olds who went through the system's primary schools during the Great Depression, nor is there any evidence that large numbers of these children could not handle simple mathematics. They were not all Rhodes scholars (though some became so), but a standard of achievement was maintained that apparently prevented large numbers of illiterate children, or children who could not make change of a dollar, from existing among our primary school graduates.* As implied earlier, the author was familiar with the chronically depressed coal mining regions of what is known today as northern "Appalachia" in the late 1920s and 1930s, where there were vast numbers of Eastern European immigrants. Here, during the Great Depression, men roamed the countryside begging for food, and in some areas the economic situation had deteriorated to a barter system. Here, immigrant parents, de facto segregated, economically exploited, living in grinding poverty, generally could be of little help to their children in school work. Many still could not read the language they spoke--Polish, Magyar, Syrian--anything but English. In the United States in 1920, 13.1 percent of white foreign-born residents told the census takers they could read neither English nor their native tongue; the figure apparently had remained substantially the same since 1890.** There is, however, some reason to think this figure is optimistic for the later immigrant groups, e.g., the following table gives illiteracy rates for the southern provinces of Italy in 1901, the source of so many of our immigrants in the early 1900s.

---

*Schoener, ed., Portal to America, p. 210.

**U.S. Immigration Commission. Reports. V. : (Wash.: G.P.O., 1911), p. .

***Binzen, Whitetown, U.S.A., p. 44.

****U.S. Immigration Commission. Reports. V. 29: The Children of Immigrants in Schools, p. 97.

---

*See "The Educational Process."

**U.S. Bureau of the Census, Historical Statistics of the United States: Colonial Times to 1957 (Wash.: G.P.O., 1960), pp. 206-214.

	Percent of Illiterates					
	6 Years and Over			21 Years and Over		
	Male	Female	Total	Male	Female	Total
Abruzzi	58.5	79.8	69.8	59.5	85.2	73.4
Campania	56.9	72.6	65.1	57.3	76.5	67.5
Apulia	63.7	75.3	69.5	63.3	80.3	71.9
Basilicata	66.5	83.1	75.4	67.4	87.9	78.7
Calabria	69.2	87.0	78.7	67.7	89.5	79.8
Sicily	65.2	76.6	70.9	64.9	81.4	73.2

U.S. Immigration Commission. Reports. V. 4: Emigration Conditions in Europe. (S. Doc. No. 748, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), p. 186. (Compiled from "Italia Annuario Statistico," 1905-1907.)

Furthermore, census data are not an accurate measure of literacy, for no proof of performance is required in a census survey, and only those with fewer than five years of school were even asked this question. (Sixteen years ago, in 1959, the rate of illiteracy among Negroes was thought to be 7.5 percent and in 1969, 3.5 percent, but since 1952 only people not having completed six grades of school were asked about literacy.* As we have seen, however, functional illiteracy runs to several times that number among Negroes of all levels of education.**)

These pre-World War II times were the "bad old days," and no one who spent most of his primary school years in one of the really bad areas during the Depression could wish his or anyone else's children to exchange the existence of children today (even poor children) for the economic conditions their counterparts endured then. It is important, however, to keep the environment of the "control group" of past students in mind when the stampede down the economic (or even sociological) environmentalist road to excuses for children's low scholastic achievements tends to sweep us along. We have been there before, and these factors alone seem inadequate to explain why our current school system cannot do today what it did then for terribly disadvantaged "slum" children at least up to age 16 (the compulsory age of school attendance then as now).*

---

*Statistical Abstract of the United States: 1973, p. 116. In 1952 it was found that 1.3 percent of those with five years of schooling (the limit used from 1947 to 1952 for those asked about literacy) were, nonetheless, illiterate. Historical Statistics of the United States, p. 206.

**See "Student Achievement Record," pp. 80-81.

B. Slum Violence--Then and Now

There are some aspects of our current slum areas, however, which quite likely do not compare favorably with slums of the past. The caveat that urban citizens are chronically concerned about crime and traditionally are likely to consider that "things are getting worse" should be remembered. It is to be found in every work on the subject (including those cited hereafter). Obviously such concern can color the judgment of those attempting to describe the situation at any point in time, including today. On the other hand, for this very reason, in examining past works on large city conditions, we are likely at least to see a version that does not understate the situation. Documentation on the last period during which we had large numbers of underprivileged immigrants living in our slums cites the violence, excluding that of gangs of young toughs against a stranger "simply because his looks offended them."

---

*See Chapter III, Section A., "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, pp. 30-48, for the high scholastic achievement test scores for 1937 ninth graders, a year before most dropouts occurred.

> But the crime willfully planned and executed for gain rarely involved the immigrant. The law breakers often congregated in the districts in which the newcomers lived and sometimes recruited American-born children, but not the immigrants themselves.*

Nonetheless, in light of the anecdotal and statistical evidence today, even keeping in mind the important caveat regarding the urban citizen's likelihood to overemphasize the problems of crime does not seem enough to prevent worrisome impressions. Random, violent crimes "against the person" of simple citizens, sexual promiscuity and indigence are apparently tolerated in some of our largest cities to a higher level than during the past immigrant era. One gets the impression that the slum dwelling American of 1900 would have been surprised at least by the frequency of some commonplace happenings of the average, law-abiding citizen in Harlem, sections of the south Bronx, Brooklyn, Chicago, Detroit, Washington, D.C., and many other slum areas in this country today. In 1968 it was said:

> While public "attitudes" are slippery concepts to compare, it does seem that...[based on acceptable levels of violence which change over time] the State of Massachusetts, and the United States in general, had a criminal problem less worrisome in the 19th century than in the 1960's....As the sons and daughters of Massachusetts migrated to the metropolis Boston in the late 1800's the image conjured by the fearful was the rake or tempter, not the robber or rapist.**

Even earlier in the nineteenth century in the low class immigrant areas, the threat of random violence against the person is said not to have been as high as some have implied.

---

*Handlin, The Uprooted, pp. 145-146.

**Roger Lane, "Urbanization and Criminal Violence in the 19th Century: Massachusetts As a Test Case," Journal of Social History 2 (1968), as reprinted in National Commission on the Causes and Prevention of Violence. Staff Reports. V. 2: Violence in America: Historical and Comparative Perspectives, ed., Hugh Davis Graham and Ted Robert Gurr (Wash.: G.P.O., 1969), p. 367.

> In 1859, for instance, 55 per cent of the persons arrested...in New York City were Irish-born, and a further 22 per cent had been born in other foreign countries. Yet these statistics are misleading in that few immigrant lawbreakers committed the more serious offenses. In most cases conflict with the law resulted either from petty thievery or, still more commonly, from drunkenness and disorderly conduct.*

Hard statistical evidence on the number of reported crimes in the early 1900s is also almost nonexistent. There are some records of such things as the number of arrests and the number of people charged in courts, etc., but we have no way of knowing how accurate the records were or what the arrest rate was for a given number of offenses, or the rate of persons charged for a given number of offenses reported. These statistics, therefore, cannot be converted with any significant degree of reliability into something similar to the report of offenses per 100,000 population such as is used today in the uniform crime reports of the F.B.I. The following tables may still be of interest, however, despite these vast shortcomings. The first table indicates the approximate number of arrests per 100,000 people in the city of Chicago between 1905 and 1908 for homicide, robbery, rape, and violent assault. Using an assumed arrest rate which is lower than that which is experienced nationally today, although perhaps not much lower than that of our large cities, we derive an estimated reported number of offenses per 100,000 population. Obviously this number is highly questionable. It is interesting to note, however, that using this approach, the average yearly homicide rate for the years 1905 through 1908 inclusive for the city of Chicago was considerably higher than that of 1971. In the case of robbery, the opposite is true. For 1971 the rate is about twice as high as the average yearly rate for the 1905-1908 period. Reported rapes for 1971 are twice as high per 100,000 people and violent assault almost three times as high.

---

*Maldwyn Allen Jones, American Immigration (Chicago: The University of Chicago Press, 1960), p. 133.

CHICAGO

	1905-1908 Arrests Per 100,000 Population*	Assumed Arrest Rate Per 100 Offenses	Reported Offenses Per 100,000 Population	1971 Reported Offenses Per 100,000 Population**
Homicide	37	90	41	24.5
Robbery	60	25	360	715
Rape	11.5	50	23	46
Violent Assault	53	45	118	336

*U.S. Immigration Commission. Reports. V. 36: Immigration and Crime. (S. Doc. No. 750, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), p. 36.

**U.S. Bureau of the Census, Statistical Abstract of the United States: 1973 (Wash.: G.P.O., 1973), p. 148.

The next table uses the same technique to convert the persons charged in magistrates' courts in the city of New York between 1901 and 1908. The magistrates' courts were police courts that handled the vast majority of cases that resulted from arrests in New York City. The numbers indicated were for people held for further trial or committed to institutions by those courts. By again assuming a rate of persons charged per 100 offenses, these figures can be converted into reported offenses per 100,000 population within the jurisdiction of these courts. The assumed rate of persons charged per 100 offenses is somewhat less than that of today on a nationwide basis, but again probably not much less than in the city as a whole today. In some cases, however, it is much higher than currently found in New York City. For example, the 85 percent rate of persons charged per 100 offenses for homicide is significantly higher than that of New York City today, where only 71.6 percent in 1973 and 74.6 percent in 1974* were cleared by an arrest or charging of a person. This seems, however, to be generally considered to be low, which indicates that at least in the recent past the actual rate used to be higher. A further problem with this list is that we do not know that some of the cases may not have come into courts through other channels, so that we may be undercounting considerably on the first column of the chart. It is interesting to note, however, that even if we were to double all the numbers in column three, we would not begin to approach the rate of random crimes against the person (where the victim is less likely to be an acquaintance or relative of the perpetrator) that we note for the year 1971 or 1972 in New York City--that is, in the case of robbery and rape, and to some extent, violent or aggravated assault.

---

*The New York Times, March 23, 1975, p. 41 L.

NEW YORK

	Persons Charged Per 100,000 Population*	Assumed Rate of Persons Charged Per 100 Offenses	Reported Offenses Per 100,000 Population	Reported Offenses Per 100,000 Population	
	Magistrates (Police) Court, 1901-1908			1971**	1972***
Homicide	9.5	85	11.1	18.6	20.8
Robbery	8.5	20	42.5	1131	2400
Rape	2.7	40	6.7	31	46
Violent Assault	21	40	52.5	430	1100

*Computed from persons charged (U.S. Immigration Commission. Reports. V. 36: Immigration and Crime. [S. Doc. No. 750, 61st Cong., 3d sess.] [Wash.: G.P.O., 1911], p. 36) and average population of New York during this period.

**U.S. Bureau of the Census, Statistical Abstract of the United States: 1973 (Wash.: G.P.O., 1973), p. 148.

New York and Chicago are not the most violent of our large northern cities. E.g., Detroit has a murder rate of 38 per 100,000 population, a rape rate of 56 per 100,000 and a robbery rate of 1,366. (Statistical Abstract of the United States: 1973, p. 148.)

Such numbers may or may not be of any value in getting some feel for the random street violence in our past immigrant slums, but there is another aspect of these statistics which, while again not that definitive, might be of more value as an indicator of what the level of violence in these slum areas was. In Chicago, for example, less than 23 percent of those arrested for robbery (a crime more likely to be committed against a stranger) were foreign born; the rest were native born. Over 41 percent of those arrested for homicide, almost half those arrested for violent assault and better than 38 percent of those arrested for rape were foreign born. In New York City, a little over 37 percent of those charged with robbery (the "stranger" crime), more than half of those charged with homicide, and over 60 percent of those charged with violent assault were foreign born. Over 51 percent of those charged with rape were foreign born. In a very definitive sample of the Court of General Sessions in cases heard between October 1, 1908 and June 30, 1909 (taken at the request of the U.S. Immigration Commission), native-born people outnumbered foreign born by almost two to one among those charged with robbery, and among the native born those with native father outnumbered those with foreign father by better than two to one.* This last sample, though more definitive, is very small, and perhaps not too much emphasis should be placed on it. If we do consider it, we must remember that almost three quarters of New York City's population was composed of immigrants or their children at that time,* and though their arrest rate was high, the actual rate of this large group was relatively small compared to that of the minority in the city, those of third-generation American status or more. Furthermore, in both Chicago and New York it is in the areas of homicide and violent assault where the criminal and victim traditionally were more likely to be acquainted** that the immigrants showed higher crime rates. (We do not know what the rape pattern was in those days, or how and at what rate it was reported. We do not know if rape criminals were more likely or not to be acquainted with their victims, etc.)

---

*U.S. Immigration Commission. Reports. V. 36: Immigration and Crime. (S. Doc. No. 750, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), pp. 10 and 36.

Despite the apparently rather high crime rate in our immigrant slum areas at the turn of the century, therefore, the implication that the streets were not as unsafe as today may still be valid. Though there were areas of certain cities where it was probably best not to become "involved" (sometimes because of native-born "sharpies" and an occasional "hard case")--by the turn of the century a significant degree of law and order generally seems to have prevailed. Clearly, indulging in family quarrels, fights over gambling, etc., could be a dangerous pastime, particularly in Chicago, but for the citizen who was just walking the streets in the vast "lower class" immigrant areas of our cities, there are some indications that life may have been safer then than now. By "late century" in nineteenth century Boston:

> All of the city had been brought under more or less effective patrol, and the voters were demanding that the streets be

---

*U.S. Immigration Commission. Reports. V. 1: Abstracts of Reports of the Immigration Commission. (S. Doc. No. 747, 61st Cong., 3d sess.) (Wash.: G.P.O., 1911), p. 151.

**This situation no longer seems to apply to the degree that it once did in our larger cities, e.g., New York.

> cleared not only of arsonists but of drunks, peddlers, and truants....uniformed men with revolvers were stationed not only in potentially dangerous areas but in the quiet confines of the public library.*

New York at the turn of the century had 4,156 policemen for its three and a half million population,** of whom over half over the age of twenty-one were immigrants.*** About three-quarters of the city was made up of first- or second-generation immigrants.**** In 1933 there were 19,000 policemen in New York City***** which at that time had a population of over seven million. Today with a population of 7.9 million,+ the police (city, transit and housing) have increased by better than an order of magnitude from 1900, and more than doubled since 1933 (to well over 40,000). Furthermore, in 1900 police could go into at least some of the worst slum areas to enforce laws whose breaking amounted only to a misdemeanor without "escalating" the situation to one of violence.++

---

*Lane, "Urbanization and Criminal Violence," in National Commission on the Causes and Prevention of Violence. Staff Reports. V. 2: Violence in America, p. 364.

**Oliver Jensen et al., American Album (New York: American Heritage, Ballantine, 1970), p. 189.

***U.S. Immigration Commission. Reports. V. 1: Abstracts of Reports of the Immigration Commission, p. 151.

****Schoener, ed., Portal to America, p. 210.

*****The New York Times, December 5, 1933, as reproduced in Cabel Phillips, ed., The New York Times Chronicle of American Life: From the Crash to the Blitz, 1929-1939 (London: The Macmillan Co., Collier-Macmillan Ltd., 1969), p. 176.

+Statistical Abstract of the United States: 1974, p. 25.

++Schoener, pp. 62 and 63.

Of course, the violence against strangers in slum areas today seems infinitely higher than it was during the Great Depression and the post-World War II period. People went "slumming" after dark in the first decades of this century (at least up to the 1940s) in underprivileged areas, including Harlem--does anyone do it now. It is hard to avoid the feeling that the current high rate of "crimes against the person" perpetrated against the average citizen is new in the annals of our large cities over the last seventy-five years. This even seems to be true compared to our last great immigrant slum period in the early part of this century. There may have been a dip in violence in the 1930s and 1940s but the rise has been precipitous since the 1950s. In 1949 only four percent of people in our largest cities rated crime as their cities' worst problem, ranking it behind many others including traffic congestion. Today crime is a major concern of city dwellers.*

There is also evidence that such crimes are increasingly spilling over into middle and upper middle class neighborhoods.** To the extent that such behavior is apparently tolerated on our streets, it is hard to avoid the question of whether it has a direct effect on the schools. In fact, the whole attitude toward our most recent "immigrants" to cities from rural areas of the south seems new and unusual. It seems to fly in the face of much experience and acceptable social theory encountered since the industrial revolution.

When a rural area is urbanized, or when rural people come to live in the faceless city, the informal constraints on antisocial actions of the small rural community may break down or be left behind. Traditionally such breakdowns have been compensated by the introduction or strengthening of formal constraints.

---

*Gallup Opinion Index, No. 89, November 1972, p. 23.

**The New York Times, March 31, 1974, p.

> With the rise of urban-industrial culture, formal control techniques have been employed in efforts to compensate for the declining effectiveness of informal controls of the family and neighborhood.*

Of virtually unpoliced, late eighteenth century London, with its "insufficient law enforcement," it is said:

> There was little if any security for law-abiding citizens who armed themselves and their servants and fortified their houses. Many people kept pistols within reach while they slept. Similar conditions existed in other English cities in the late 18th century as towns grew quickly in size and environmental conditions deteriorated during the Industrial Revolution.
>
> Crime in London began to decrease slowly in the late 18th century. After 1829, the new police forces were very successful, and within 30 years violent crime ceased to be a national problem.**

In the 1960s, however, when our cities were experiencing the height of the influx of rural southerners, who traditionally have a high record of violence (coincidentally primarily Negroes with the highest record of lawless violence***--72 percent of murders, 70 percent of rapes, 74 percent of aggravated assaults, 85 percent of armed robberies, are committed by members of this latest immigrant group*), a nationwide effort, in effect, greatly weakened formal constraints against antisocial behavior.** The outlawing of the preventive approach to law enforcement (no cleaning up neighborhoods by police "leaning" on known "bad actors" without trial level evidence of criminal activity), the appearance of money and lawyers to guarantee the new, vastly broadened interpretation of the rights of the accused when he did commit a crime all occurred during this time period. Such approaches as well as the very liberal--"no questions asked"--welfare benefits, etc., all can be accepted as good ideas, yet from a broader viewpoint their implementation may have had some negative effects as well.

---

*Elmer H. Johnson, Crime, Correction and Society, rev. ed. (Homewood, Ill.: Dorsey, 1968), p. 35.

**National Commission on the Causes and Prevention of Violence. Staff Reports. V. 12: Crimes of Violence, ed. Donald J. Mulvihill et al. (Wash.: G.P.O., 1969), p. 705.

***Sheldon Hackney, "Southern Violence," American Historical Review 74 (1969), as reprinted in National Commission on the Causes and Prevention of Violence. Staff Reports. V. 2: Violence in America, pp.

---

*The New York Times, September 8, 1970, p. 32.

**The cities with the largest numbers of southern emigres showed the highest levels of reported "crimes against the person":

CRIME RATES BY TYPE--POPULATION GROUPS AND SELECTED CITIES: 1971

		Violent Crime					Property Crime			
	TOTAL	Total	Murder	Forcible Rape	Robbery	Aggravated Assault	Total	Burglary--Breaking or Entering	Larceny--Theft** (Except Auto Theft)	Auto Theft
New York, N.Y.	6,729	1,611	18.6	31	1,131	430	5,118	2,305	1,586	1,228
Chicago, Ill.	3,779	1,122	24.5	46	715	336	2,657	1,143	465	1,049
Los Angeles, Calif.	6,511	1,109	15.1	73	501	520	5,402	2,649	1,470	1,283
Philadelphia, Pa.	3,043	754	21.6	27	459	247	2,289	1,037	366	885
Detroit, Mich.	8,373	1,815	38.0	56	1,366	355	6,558	3,391	1,669	1,498
Houston, Tex.	4,757	715	24.5	43	415	233	4,042	2,120	889	1,033
Baltimore, Md.	5,960	1,850	35.4	59	1,038	718	4,111	2,023	1,109	978
Dallas, Tex.	5,460	1,051	24.4	69	337	621	4,408	2,156	1,439	814
Washington, D.C.	6,917	2,171	37.1	83	1,514	536	4,747	2,540	1,029	1,178
Cleveland, Ohio	6,232	1,170	36.3	58	806	270	5,062	1,586	804	2,673
Indianapolis, Ind.***	3,053	448	8.0	35	282	124	2,605	1,265	739	600
Milwaukee, Wis.***	3,031	202	7.2	14	91	90	2,828	638	1,363	827
San Francisco, Calif.	8,228	1,473	14.6	73	942	443	6,755	2,612	2,307	1,837
San Diego, Calif.***	3,606	296	5.2	20	156	114	3,310	1,226	1,563	521
San Antonio, Tex.	4,021	499	14.5	33	137	315	3,522	1,593	1,206	723

*Offenses known to the police per 100,000 population; population in 1971 as estimated by U.S. Federal Bureau of Investigation.

**Population group data include and selected city data exclude larceny under $50.

***These cities have low southern immigrant populations.

Source: U.S. Federal Bureau of Investigation, Uniform Crime Reports for the United States, 1971.

In any event in the worst areas of our cities the most cowardly type of muggers (preying primarily on children, women, the old and the weak), rapists, pathologically vicious hoods, etc., own the streets after dark, while honest citizens barricade themselves in their apartments till daylight.* Even then, hustlers, pimps, drug pushers, addicts, prostitute/addicts, "gigolo" loafers (flitting from one "unwed mother" to another as child support and welfare monies dwindle) and other unsavory characters roam the streets, evidently with impunity. Homes are burgled of anything movable and police seem to have little time for or interest in tracking down the thieves. Furthermore, some police, as in days gone by, evidently are on the take from those who prey on society, occasionally including today's drug pushers. In certain core city areas currently the level of violence after dark is so high that one fears, at least temporarily, that the fabric of society might begin to come apart. It becomes obvious in studies of the subject (be it a town in Vietnam or Cicero, Illinois) that there is a level of violence directed against the specific individual where the normal factors which determine the functioning of a society no longer apply. Admittedly societies and neighborhoods are amazingly resistent but they all have limits. When these are reached, normal sociological theory is often irrelevant.**

Schools and universities are much more fragile institutions and their tolerance for violence much lower. If higher levels of violence begin to spill over into them from the neighborhoods they can be rather quickly turned into areas where normal educational theory, etc., no longer applies. On the other hand, they are normally much more easily isolated from such violence if the administration insists its students leave such habits outside (as they used to), and they receive staff and city officials' support.

---

*NBC program on Detroit.

**Frank E. Armbruster et al., Can We Win in Vietnam? (New York: Praeger, 1968), pp.

The current, often irresponsible, permissiveness encouraged in (and sometimes virtually forced on) the more responsible underprivileged citizens indeed seems new, and may well color the attitude of the pupils from the slums. Traditionally people, even the underprivileged, have been held responsible for their acts in our cities. A New York Times article of March 6, 1893, in complaining about the stacks of refuse cans in the streets due to lack of garbage collection during heavy snows which the city could not clear away, stated,

> In the better parts of the city, householders and storekeepers have taken steps to get rid of the stuff themselves, but in the tenement-house districts these barrels and boxes of ashes and garbage have been allowed to rest until they were tipped over and their contents mixed with the snow and mud.

Streets in a "neighborhood which is largely populated by Russian and Polish Jews, Bohemians, Slavs, etc., the most unclean population which the city has," were said to be "in a terrible condition."* Traditionally the authorities, the newspapers, etc., "leaned" on the newcomers to measure up to the standards of the community and obey the laws. Today such pressure is hard to find, sometimes even to obey the laws.

Everybody in the slum areas of New York City knows that today virtually nobody serves time for most of the crimes on the books. For example, despite Mayor Lindsay's incessant cries (through the media and before Congressional committees) for stronger Federal gun laws, virtually nobody served time for carrying concealed pistols in New York City, even though bushel baskets full are taken from "hoods" each week, and New York City and State have the harshest gun laws on the books. Nor is this situation confined to New York. The U.S. Attorney General, in hearings on his confirmation before a Senate committee, stated:

---

*Schoener, ed., Portal to America, p. 62.

> I live in the District of Columbia and I have lived here ever since I have been here. When I came, there was a registration law, a very stiff registration law which requires the registration of guns in the District. I hoped that this would be vigorously prosecuted. It is not. There are no cases brought under it.*

After listening to assistant district attorneys and others in the field, one gets the impression that the criminal justice system has almost broken down in some of our large cities, at least as far as non-fatal street crime is concerned. (Stringent new New York State drug laws may change the picture for drug offenses in New York City). Homicide rates increased in Chicago, Detroit and Washington, D.C. between 1973 and 1974, and in New York where they decreased from 1,669 in 1973 to 1,530 in 1974, of the cases where such facts could be ascertained (about 83 percent of homicides), stranger-murders (victim and perpetrator have no previously known relationship) rose from 28 percent to 34 percent.** Such city streets are becoming dangerous for a pedestrian minding his own business, a quite different murder victim from a barroom brawler, unfaithful wife or husband, suspiciously lucky gambler, swindler, etc.

---

*This section of Saxbe's testimony is quoted verbatim in The American Rifleman, March 1974, p. 45.

**The New York Times, March 23, 1975, pp. 1 and 41 L.

It seems children living in big city slum areas today are underprivileged and deprived, but not necessarily because of discrimination or economic conditions. They and their long-suffering parents are deprived of the protection necessary to raise a family, despite the heavy tax burden all citizens bear to support public services. Youngsters in rough areas have always been in danger of emulating a "hood"-hero but when hoodlums and hustlers are the only ones who can walk the streets, children are more likely to be influenced.* In 1968, 27 boys under 16 were arrested for murder in New York City. In 1972, 73 were arrested. In 1968, 77 males under 16 were arrested for rape; in 1972 the number was 158. In 1968, 2,487 juveniles were arrested for robbery; in 1972 the number had risen to 4,086. The number of juveniles arrested for burglary remained about the same--3,884 and 3,703.** One could also speculate that youngsters on the streets, especially "dropouts," were a concern for everybody, particularly in many poorer neighborhoods of larger cities.

---

*Several years ago the author had some contact with a group of adult Negroes in the toughest section of Harlem who had an excellent record of accomplishments with young people. Their greatest desire was to develop a situation where decent men could function in the area so the children would pick up their values, habits, language, other than those of the hustlers. They were unanimous in the opinion that city and other upper middle class white-instigated and backed community programs were an utter failure, and on the evidence in that area I was forced to agree. Dan Watts, former Acting Director of the Human Resources Development Administration for the City of New York, states flatly that such programs (274) were not only ineffective but often counterproductive.

**The New York Times, February 26, 1974, p. 41.

YOUTH CONSERVATION CAMPS

QUESTION: "Some people say that all young men between the ages of 16 and 22 who are out of school and out of work should be required to join a Youth Conservation Corps to carry on their education, learn a trade and earn a little money. Do you approve or disapprove of this plan?"

(Underlining author's emphasis)

	May 1971			August 1964		
	Approve	Dis-Approve	No Opinion	Approve	Dis-Approve	No Opinion
NATIONAL	66%	27%	7%	73%	21%	6%
SEX						
Male	62	33	5			
Female	71	21	8			
RACE						
White	64	29	7			
Nonwhite	86	10	4			
EDUCATION						
College	47	45	8			
High School	69	26	5			
Grade School	80	11	9			
OCCUPATION						
Professional and Business	58	35	7			
White Collar	60	33	7			
Farmers	64	30	6			
Manual	70	26	4			
AGE						
18-20 years	56	42	2			
21-29 years	59	38	3			
30-49 years	66	29	5			
50 and over	72	18	10			
RELIGION						
Protestant	65	28	7			
Catholic	72	22	6			
Jewish	x	x	x			
POLITICS						
Republican	67	25	8			
Democrat	72	22	6			
Independent	59	35	6			
REGION						
East	70	23	7			
Midwest	65	26	9			
South	69	26	5			
West	58	37	5			
INCOME						
$15,000 and over	56	37	7			
$10,000-$14,999	62	31	7			
$ 7,000-$ 9,999	64	32	4			
$ 5,000-$ 6,999	75	21	4			
$ 3,000-$ 4,999	64	26	10			
Under $3,000	81	9	10			
COMMUNITY SIZE						
1,000,000 and over	70	22	8			
500,000-999,999	68	24	8			
50,000-499,999	67	29	4			
2,500- 49,999	60	33	7			
Under 2,500, Rural	67	26	7			

Gallup Opinion Index, No. 73, July 1971, p. 25

As indicated earlier, it is difficult to attribute the crime, juvenile delinquency, sexual promiscuity, vandalism, etc., solely to poverty or rural people moving to urban areas,[*] based not only on comparisons with past conditions but in comparing certain low income areas and urban areas with heavy rural influx elsewhere in the United States today. Idaho (thirty-fourth of the fifty states in personal income) and Maine (forty-third) have low violent crime rates[**] and when the poor farmers from Idaho and elsewhere went to Seattle, they failed to drive the murder and non-negligent homicide rate for that standard metropolitan area (Seattle-Everett including all suburban fringe towns) above 4.6 per 100,000 people, while robbery stood at 151, in 1973.[***] Comparable figures for the standard metropolitan area of Chicago were 14.1 and 388, for S.M.A. Detroit 19.3 and 470, and for S.M.A. New York 17.5 and 747.[****] All evidence points to high urban crime in the cities of the north and the south (New Orleans S.M.A. had a murder and non-negligent manslaughter rate of 21.6 and Little Rock-North Little Rock, Arkansas S.M.A. a rate of 14.7, Atlanta S.M.A. 21.8, Columbus, Georgia S.M.A. 15.2, etc.[*****]). It is in the core cities of the north, however, where crime seems to have spilled over into the schools to the greater degree.

---

[*] Though one still hears those who more or less follow this theme. On March 24, 1974, a television report on the spectacular deterioration of a modern high rise, low income public housing project in Newark, broadcast by WNBC, Channel 4, New York, some of those interviewed tended to lean this way.

[**] Statistical Abstract of the United States: 1974, pp. 148 and 380.

[***] Ibid., p. 922.

[****] Ibid., pp. 882 and 902.

[*****] Ibid.

At the same time youngsters are now faced with other questionable environmental factors. In all socioeconomic levels and in almost all areas these days, they are exposed to motion pictures in which gutter language and illicit sex are treated as the norm, and illegal behavior and irresponsible, antisocial people are glamorized. As such movies of the late sixties have become dated, they began to appear on television, and though obscenities, excessive nudity, etc., are cut out, adequate "editing for television" is not possible in many cases. Furthermore, frontal male and female nudity has appeared in dance programs on public broadcasting television. In addition, many recent television programs, particularly post-prime time shows, have themselves assumed a "sophisticated" sexual permissiveness and a glamorous approach to highly questionable lifestyles in their verbal material, which is far from par for the families of most adolescents (who watch these shows when parents are out or when the youngsters themselves are out babysitting, etc.). Magazines, of course, are the worst offenders since there is no rating system to guide parents, and their formats are slick and seemingly respectable. Even magazines for the early adolescent occasionally have run questionable and irresponsible articles.* Articles supporting smoking pot, "documenting" the "generation gap," parents' inability to "understand" their children, the "hypocrisy" of the older generation, etc., have abounded on the magazine stands in recent years.

---

*The epitome may have been reached when Ingenue, a magazine for early teenage girls, ran an article, "After the First Kiss Where Do You Go?" (April 1973) which described mutual, extreme "petting" including initial stages of oral sex as acceptable. (Intercourse had drawbacks--girls could get pregnant and venereal disease was a possibility; curiously, at least from the layman's viewpoint, the article did not associate oral sex with risk of infection.)

Such pupil off-hour environmental factors are new. Apparently never before have parents of the underprivileged youngster (or any youngster) been forced to cope with such a widespread attack on authority, the home, morals, values, etc., while at the same time trying to earn a living, raise a family and see to their education. When schools too began to back down many parents were in despair.

Many a pupil from core city sections of our large cities brings to a school a feeling that he is highly unlikely to suffer any [illegible]nsequences for breaking rules, or for that matter, the law. Permissive schools merely reinforce this feeling and "prove" again that only the naive do things the hard way--by the rules. Very soon he is "hustling" and "shaking down" the smaller and weaker students for whatever he can get. If he is cross-bused into a non-slum school, he is likely to feel like a bear that has fallen into a tub of honey--until the local children learn to stop bringing lunch money or valuables to school, stop using the rest rooms, etc. As important, he disrupts the classes, uses unbelievably filthy language--and get aways with it in the classroom just as he does in the streets, even when addressing a policeman.

Indeed in city and suburban areas policemen, youth club directors, school bus drivers and even teachers, etc., are apt to accept language and behavior on the part of youngsters which cannot be described as anything but delinquent. What is more, they all too often indulge in such language themselves in the presence of youngsters, thinking it increases communication, making the adult one of the boys (or girls).

Children of the past were not deprived in this way, deprived of the structured existence and generally proper and civilized public behavior of adults in positions of authority over children. One can but consider the effects of such deprivation on the youngsters involved in the civilizing process of growing up in an advanced country and society.

CHAPTER VII

THE ATTITUDES OF RECENT, FASHIONABLE WRITERS, ADMINISTRATORS AND EDUCATORS ON SOME EDUCATIONAL/SOCIAL ASPECTS OF SCHOOLS

An examination of the recent history of education in the United States during the 1940s and again in the late 1960s and early 1970s is a somewhat troubling experience. As we have seen, in the 1940s the progressives gained influence and the social aspects began to take on importance in the school system, apparently partly because of the general milieu of the late Depression years and the momentum of the New Deal-type programs. During World War II the greatly depleted ranks of competent teachers were constantly told the standard curriculum was in most cases not relevant enough. As we have seen, educators in this era began to talk of "educating the whole child" and a lessening of the emphasis on academic achievement of all pupils seems to have been accepted by many schools.*

In the late 1960s something similar to the events of the 1940s began to happen and, as indicated earlier, the relevancy of not only the curriculum of the "silent fifties" but even the scope and priority of the goals of education was under attack. In the 1960s and early seventies there was no reduction of experienced educators as there was in the early forties. There was, however, a great influx of new younger teachers,** which might have tended to weaken the educators' ability to withstand the attack on the "role and mission" of our school systems.

---

*See p. 127.

**See p. 19.

This alone cannot explain why state departments of education, principals and experienced teachers allowed proven teaching methods to be discontinued. Normally these older, experienced educators, for reasons of proven effectiveness, had the courage of their convictions and had faith in the methods they used. (Young--and some old--radical innovators have always been around; principals usually told them to watch a teacher with thirty years experience and learn the trade.) In the mid-1960s, however, when examining our schools under the assault of fashionable "counter-culture" (and even today when that assault has subsided), one rather quickly is led to ask whether many educators and policy-makers in this period had not once again lost perspective.

First, though numbers of dedicated teachers with a clear purpose--to teach children the fundamentals--were in the system in the 1960s (and indeed can still be found there), it appears that some of the most articulate educators and writers were no longer sure what the goal of the educational system was or should be. Second, having discovered the traditional plight of the underprivileged and at the same time discovering that one group included in this category were Negroes who had additional disadvantages, many educators and writers on the subject (as we have seen) also seem to have doubted the entire unparalleled process of successful, upward mobility in this country, and therefore, of course, the part played by education in it. Third, these troubling occurrences happened to coincide with a period of change in the approach to teaching. "Truth" was to be taught (as opposed to "fantasy" about the excellence of our government, the system's justice, etc.) to our primary and secondary school children, and "relevancy" to immediate headlines, as previously indicated, became a major influence on curricula. Fourth, as indicated earlier, despite the anguish of many dedicated teachers, standards were dropped and, conincidentally, the work demanded of teachers significantly reduced. Quite possibly due to these weaknesses in the ranks of educators, and secondarily, as mentioned earlier, to the euphoria of the atmosphere of the Kennedy years and the "war on poverty" era, there appeared a disturbing tendency to change priorities and activities in education. Many articulate educators apparently were often prone to jettison many proven fundamental processes of education in favor of insufficiently tested but supposedly more relevant practices and curricula. It may be time to ask if there may not be some credence to the charge that the current crisis in our schools could not well be in large part due to these new practices, rather than to the inadequacies of the old system which more or less was abandoned.

The thought process of many dissatisfied articulate educators of the 1960s apparently was by no means considered to be less than respectable, e.g.:

> In a society where the ballot box was not merely the symbol but the reality of access to power, democracy did seem to depend on a marching together of literacy and suffrage. In a society profoundly divided between a rich minority and a poor majority, education to promote social integration seemed necessary for social survival. It is hard for us to recapture either of these concerns. When we think of the importance of voting it is not of the well-informed newspaper reader who puts aside all demagoguery and votes, as a social atom, on the pure merits of the case; it is of the masses of disfranchised poor who can use the ballot to alleviate their exploitation, and we need effective demagogues and demagogic techniques to make it work.*

---

*James E. McClellan, Toward An Effective Critique of American Education (New York: Lippincott, 1968), pp. 6 and 7.

The author quoted did not see the requirement for drastic changes in our school system, although he saw the need for "relatively simple" changes, "considering the effort and money which went into its creation originally" to accommodate Negroes' needs.* Even in the case of Negro requirements, however, one feels that someone should have been suspicious of a process that to a great extent recommended we "throw away dirty water before we had clean." The Negro student's learning progress apparently has not improved under the new system. In fact, it seems to have decreased, and the question of whether there exists a system superior to the old one for teaching Negro or white students (even if one accepts the description of changed requirements outlined above) was not and has not been answered. Nonetheless, fashionable writers, administrators and educators appeared to join in an unseemly rush to eliminate many fundamental processes of the old system.

The facts seem to be that much of what has been done to improve the school system has little to do with improving education and may actually be a disrupting influence. As we have seen, such improvements include changes that have often resulted in the removal of much of the discipline necessary to maintain adequate order in a teaching/learning environment. Writers on education have also recommended changes in curriculum to incorporate attitudes and terminology of the slum into school systems (including attempts--to the dismay of some well-known Negro educators) to list ungrammatical slum speech as an initially acceptable "indigenous language" with correct English as a "second language they need."**

---

*McClellan, Toward An Effective Critique, p. 8.

**Walter Loban, "A Sustained Program of Language Learning," in Marjorie B. Smiley and Harry L. Miller, eds., Policy Issues in Urban Education (New York: Free Press, 1968), pp. 233 and 237.

as we noted earlier, by the 1970s such attitudes had not only begun to appear among teachers in the schools but some--one fears often self-serving teachers, for grammar is hard to teach--said "flatly there is no correct" grammar or speech pattern.[*] Furthermore, slum children have even been given to understand that their behavioral patterns are assets and that society has no right to expect them to accept the norms of behavior of a respectable citizen in order to make a decent living. In fact some educators have suggested that slum children be given credit in school for "street skills."[**] That such practices are frequently dishonest and illegal is apparently overlooked, as is the difficult job of insisting that these children acquire the education they will need throughout this society, and which teachers are paid to impart.

Most disturbing, perhaps, was the apparent immunity to logical criticisms of the innovations which some educators seem to have developed in this period. One writer, describing the attitude of many conservatives, states that,

> Racial integration, however desirable and necessary, is the concern of other institutions in the community and to disrupt the instructional process by attempts to provide integrated schools in a segregated metropolis is an overextension of the school's role, and takes its attention from the task which only it is set up to do....
>
> ...But, for the school as an institution to deny its involvement in those concerns, and its share of responsibility for the problem, can only further alienate it from those of its pupils with whom it fails most dramatically already in its instructional role.[***]

---

[*] See p. 134.

[**] Nathan Caplan, "Street Skills of Many Hard-to-Employ Youths May Hinder Success in Job Training Programs," Institute for Social Research Newsletter, University of Michigan, v. 1, no. 19, Autumn 1973, pp. 5-7.

[***] Smiley and Miller, eds., Policy Issues, p. 284.

The reader will note that the question of whether busing for "racial balance" in northern cities (the issue under discussion) should be carried out at the cost of the "disruption of the instructional process" (a question at least worth considering) was not answered directly. The implication of such a writer's answer, however, seems to be yes, in which case one can accept the goal but still question its benefits compared to the costs of disrupting functions which have always been considered essential for socioeconomic upward mobility of any group--the vital fundamentals of teaching reading, writing and airthmetic to primary and secondary school students, including Negro boys and girls.

As mentioned earlier, one gets the distinct feeling that this loss of perspective is largely due to a crisis attitude fanned by the general long-term "revolution" of the young and the rapid, the deep-seated fundamental changes in general, perceived in the late 1960s by many writers, administrators and educators. To some of them it was abundantly clear that things were so different and a crisis of such proportion was descending on us at such a rate, that on this subject nothing was left to discuss.

> This book is based on two assumptions of ours. One, it seems to us, is indisputable; the other, highly questionable. We refer to the beliefs that (a) in general, the survival of our society is threatened by an increasing number of unprecedented and, to date, insoluble problems; and (b) that something can be done to improve the situation. If you do not know which of these is indisputable and which questionable, you have just finished reading this book.*

The contention that, in 200 years of our history (and presumably in 5,000 years of civilized history), there was no precedent for our current problems was, and to some degree still is, widely accepted among such writers and even some educators. Among others it is quite difficult to suggest that perhaps the old school process might indeed be adequate for the task. In point of fact, however, in a calmer milieu, it seems that the extremist arguments would have been far from formidable.

---

*Neil Postman and Charles Weingartner, Teaching as a Subversive Activity (New York: Delacorte, 1969), p. 1.

First of all, in the area of education, there seemed to be adequate precedents for solutions to many of the modern, "insurmountable" problems. After all, as indicated earlier, the old school system had been teaching children of every color, creed, language and socioeconomic level to read, write and cipher for two hundred years, and for close to a century a universal compulsory educational system has been apparently functioning adequately.

By the early 1970s, however, the basic priorities of education were being questioned by state departments of education. An ad hoc committee on "Test Score Release," as quoted in the document, A Report of Achievement Test Information, Fall 1972, in Grades 4 and 8, says of these data:

> For example, basic skills development in music, art, and interpersonal relations are almost always excluded from such testing, while arithmetical and punctuation skills are almost always included; thus, the tests embody assumptions about priorities in learning arithmetic and correct punctuation which may or may not reflect the needs and aspirations of given communities.*

(One is curious how one should test for "development...in interpersonal relations" or even in music and art, rather subjective areas compared to arithmetic and reading.) It is interesting that the priority of these basics is being questioned. The traditional rate at which children have been learning over the decades is also now being questioned. The New Jersey Department of Education, Division of Research, Planning, and Evaluation/Field Services, in discussing multiplication and division in fourth grade, stated, "There is some question by committee members as to whether the students are 'ready' for these items at this grade level."*

---

*A Report of Achievement Test Information, Fall 1972, in Grades 4 and 8, Research, Planning, and Evaluation, Statewide Testing Program, State of Rhode Island, Department of Education, October 1973.

Departments of education now also use the "external factors" argument. Rhode Island's Department says, "Persons who study school quality believe that there may be out-of-school factors which are very powerful in influencing how children perform on tests."**

Other departments list causes of downward trends ranging from irrelevancy of tests vis-a-vis changed curriculum to social unrest. Hawaii's Department of Education states:

> Several speculations may be ventured in explaining declines in test scores. Hawaii is not unique in showing a gradual decline in test averages since 1969. The situation appears to be nationwide. Some authorities in educational testing and measurements attribute the downward trends to curriculum changes, thereby implying that the content of the tests may not be as applicable as it once was. Changes in student characteristics are also cited as a possible cause of dropping test scores. Attitudes toward school, societal unrest, changing value systems have all been considered in formulating hypotheses for explaining the gradual decline in school achievement as measured by standardized tests. As further research is focused on these developments, specific causes may emerge in due time. On the other hand, in these rapidly changing times a reversal of present trends may occur.***

---

*"EAP State Report 1972-1973 Educational Assessment Program," New Jersey Department of Education, Division of Research, Planning, and Education/Field Services.

**A Report of Achievement Test Information, Fall 1972, in Grades 4 and 8, State of Rhode Island, Department of Education, October 1973.

***Summary Report of Statewide Testing Program 1972-1973, Report No. 83, Office of Instructional Services, Evaluation Section, Department of Education, State of Hawaii, October 1973, p. 19.

The striking feature in all these writings is the absence of any reference to the possibility of some responsibility for pupils' falling academic achievement resting with the educators.

A vaguer, but perhaps extremely important, "class" aspect seemed also to be at play in recent years. In examining so much of the evidence of the attitudes of activists, writers, educators and policy makers over the past decade, there are disturbing indications of guilt-ridden, upper middle-class people trying to cope with a serious issue for disadvantaged children. Running through this also is perhaps an odd kind of unintentional "racism." Perhaps because these upper middle-class people do not really understand, or cannot empathize with, the successful struggles for upward mobility of the earlier disadvantaged, non-English-speaking (and non-white) ethnic groups, they seem to be saying that only the Negro can't make it under this system. This is possible, of course, and even though so many of the Negroes' problems parallel those of other disadvantaged groups, they may have other difficulties which could make it impossible to succeed in school or afterward. But guilt-ridden, upper middle-class whites are hardly the ones to judge. Prior to the 1960s, Negroes finished Northern high schools and went to college, and, as we have seen, some all-Negro high schools turned out college-bound students superior to the best white high schools in their areas.* Even those Negroes who flunked out or dropped out of high school in those days may have had a better grasp of the fundamentals than many of those who slip through school today.

---

*For example, Dunbar High School, Washington, D.C.

As stated earlier, this is not mean to imply that the old system had no faults, nor that it needed no improvement. The education received by Negroes as well as immigrant children could have been better, and their chances for success greater. The immigrant children did become literate, however, and they did acquire enough mathematics to hold the journeyman positions they assumed. As we have seen, the most deprived of the immigrants' children became some of the most affluent citizens, and their educational level equalled or surpassed that of the nation's other large identifiable groups.* Today one cannot say that about the children of the disadvantaged with the same confidence.** One must ask again whether it can be that many of the current ills may have been aggravated by the recent attempts at improvement.

In fact, these days one gets the impression that perhaps we should not be unqualified in our deference to educators when it comes to teaching children. To an alarming degree we see educators in schools behaving in a manner which, as mentioned earlier, seems to imply that they believe children think like fully educated adults, which gives parents pause. First, let us look at the debunking process so popular among writers on education in the last decade:

> ...Hemingway replied, "...in order to be a great writer a person must have a built-in, shockproof crap detector."
>
> It seems to us that...Hemingway identified an essential survival strategy and the essential function of the schools in today's world. One way of looking at the history of the human group is that it has been a continuing struggle against the veneration of "crap"....The mileposts along the road of our intellectual development signal those points at which some person developed a new perspective, a new meaning,

---

*See pp. 119 and 193-186.

**WINS, September 1, 1973, statement by Chancellor Irving Anker.

> or a new metaphor. We have in mind a new education that would set out to cultivate just such people--experts at "crap detecting."[*]

What never seems to be understood by educators with a penchant for such activities in primary and secondary schools, is that in most cases children (particularly young children) do not have the adult's strong feeling about things other than those their parents deem fundamental to their safety and happiness. To take an over-simplified example, debunking the myth of George Washington's innate honesty is merely telling the grade school child that Washington was a liar, because the student has no strong feelings in the other direction to balance out the debunking. Telling the child he was just like anyone else is no good, either. Furthermore, the image of Washington as a man of integrity and courage (note the "myth" does not ascribe brilliance to him) is a historically correct one to implant in young minds, just as is the idea that this is a great and noble nation, for as nations go, it is. (Note that we are nearing the realm of revisionist history here.)

A more insidious process, however, may be that being tried on our Negro children. The debunkers' arguments that history texts do little to indicate the true role of Negroes in the Civil War, etc., are probably valid.[**] There are limits to this approach, however. The same lack of emphasis can be said to hold true for other ethnic groups. In fact, the many photos of Negro troops in Union blue document their sacrifices in that war. The same cannot be said for people of Irish or German descent, etc., whose ethnic identity is less obvious. This should come as no surprise, however, because the distinction was between Confederates and Unionists. The boys in blue were all thought to be of one group, just as the boys who went to Europe in World War I were all considered Americans, even though these "yanks," from Georgia and Alabama, were of German, Polish, Irish, etc., descent, were Negroes, Indians, Whites, Orientals. Textbooks are criticized for their coverage of the Revolutionary period, for though they mention that the first man to fall at the Boston Massacre was a Negro, Crispus Attucks, no mention is made of outstanding Negro personalities, for example, Phillis Wheatley, poetess, and Benjamin Banneker, mathematician.* If the textbooks mention white poets or mathematicians of the Revolutionary period, the emphasis must be slight for no student seems to know of them. In any event, I question this whole procedure, for it tends to be divisive without adequate evidence of its value.

---

[*] Postman and Weingartner, Teaching as a Subversive Activity, p. 3.

[**] See Irving Sloan, "Balance and Imbalance: 'New' History Texts and the Negro," in Smiley and Miller, eds., Policy Issues, pp. 184-200.

Even more divisive is the movement which directly or indirectly encouraged American Negro school children to identify with African Negroes. This development of the various Afro-American study program is a highly questionable procedure from many points of view, yet because of the attitudes of activists inside and outside the educational system, we have used our mandatory school systems to offer the opportunity to a segment of our citizens to place themselves in this questionable position. Learning a foreign language is always advisable (though in our society there may be a limited demand for Swahili, at least in scholarly and business pursuits), but encouraging Americans to identify with a foreign group or country and emphasizing this identity implies that our own unique culture is somehow inadequate. This emphasis on ethnic identity with foreign nationals on the part of some of our pupils can lead to embarrassment of certain groups of them through no fault of their own.

---

*Sloan, "Balance and Imbalance," Smiley and Miller, eds., Policy Issues, p. 189.

Traditionally, most underprivileged immigrants (including those most blatantly exploited) have striven to quickly cut their ties with the "old country" and identify only with America, which "was better" than from whence they came. They used the American heritage for identity in their successful movement up the socioeconomic ladder. It may be true that "the third generation is sufficiently American, but there is the problem of self-identification..." and that Marcus L. Hansen's "What the son wishes to forget, the grandson wishes to remember"* may also be true. But such arguments, despite the credentials of those who make them, are not conclusive. There is too much evidence of grandsons and great-grandsons who do not feel this way (to say nothing of the millions who do not know what their ethnicity is), who are well-adjusted, successful people. In fact, with a few exceptions, most groups (including immigrants' offspring) do not seem to identify readily with foreign nationalities. They seem at least as likely after saying they are American, to identify with a religion, a region--southerners, westerners, midwesterners, New Englanders, a state--Texans, Missourians, Californians, or even cities--New Yorkers, Philadelphians, Bostonians.

---

*Dr. Will Herberg, U.S. News & World Report, June 4, 1973, p. 57.

Yet we now help to place our young Negro citizens in a position where they may not only feel more "segregated" but may also feel they have to defend past and present actions of undemocratic, often savage groups on a foreign continent from whence their great-great-great-grandfathers came. That is quite a burden to ask children of any identifiable ethnic group to bear for far too many of us have forebears who can be traced to countries whose records are not the best: the brutality of the Swedes in the Thirty Years War, the French during the Terror after 1789, the Germans in the 1930s and 1940s, the long record (including the current one) of terrorism exercised by the Russians, the Chinese, etc.

One is again haunted by the question of why such programs foster the official backing they do. Obviously administrators and educators felt they were useful in forming the self "identity" of Negro children. But why identify with a specific group and even a foreign source group or country? Why not identify with the American heritage? Some might answer because the Negro was originally enslaved, alienated, shamefully treated, etc., so he could not be expected to identify with this society, which could be true, but these decisions were largely not made by Negroes. The schools encouraged this movement and the school system was largely white controlled. Are we seeing guilt-ridden, upper middle class whites working out their own feelings again?

As might have been expected, however, the constant official, tax-supported emphasis on these ethnic studies for one or two groups through the 1960s has finally led to an official, tax-supported "backlash" of white ethnic studies. Under the banner headline "White Ethnic Groups in Nation are Encouraging Heritage Programs in a Trend Toward Self-Awareness," it was announced that "Contrary to the philosophy of assimilation, ethnic pride and ethnic identification are being stressed in the new programs." The Ethnic Heritage Studies Act will provide $2.5 million in Federal funds for a program which "even the elementary and secondary schools are exploring...." One enthusiast of considerable national influence is quoted as saying:

> The action marks the first time in American history that Congress has recognized that the melting pot was not the reigning theory of American society but that ethnic pluralism was much more the reality.*

Such talk must be regarded with caution. This country is a melting pot, current popular ideas to the contrary, probably to a greater degree than any great nation in the world.** A great and increasing difficulty about ethnic studies in this country is, with very few exceptions, isolating white ethnic groups. As in the case of Negroes, one would have to set arbitrarily a level of one sixth German, Polish, etc., as being enough to identify many a person with an arbitrarily selected dominant ethnicity. The facts apparently are that white Americans by and large intermarry with something less than primary regard for the pure ethnic background of their spouses.*** The important

---

*The New York Times, January 28, 1974, p. 11.

**One is reminded of the length of time that "Volga Germans" retained their identity inside Russia.

***One author stated that figures he quoted showed that within their own religious group ethnics still tended to marry similar ethnics and by and large the largest group within which any one group was likely to marry was its own. On the other hand, the figures also showed that among a sample of nine groups of Catholic "ethnics" in the United States in 1963, it was found that three showed a majority intermarrying with their "own kind," two showed 50 percent marrying with their own kind and three showed a majority marrying other ethnics. It should be noted that ethnicity was determined by the ethnicity of respondents' fathers consideration, one would think, is the American heritage as the melting pot.

Rejecting that attitude, alienated writers, administrators and educators have attempted to reverse a traditional thrust in the American school system. The opinion of another commentator that "...he who understands his own traditions is more likely to be sympathetic to someone else"* seems questionable. Regardless of how history books have compensated, by most standards of our particular society, nineteenth century American Indians, African Negroes, and in some sense even many Eastern Europeans, are likely to compare unfavorably with Central and Western Europeans, the forebears of most of our population.

I think that under these ethnic programs the chances of divisiveness are increased and (one is tempted to say as usual) for very vague, ostensible objectives of very questionable value. Fortunately, the more sensible influence of the family and the children's innate common sense (the vast majority of children had higher morale than many alienated writers, administrators and educators--in general they had been happy**) should largely negate this program. There may be some "self-fulfilling

---

and that 20 percent of the respondents were "half breeds" already. Furthermore, about 11 percent of the original sample had married non-Catholics whose ethnicity was not listed, and about 7 percent had married people of unknown ethnicity. Both groups were dropped from the sample from which the percentages mentioned above were derived. Andrew M. Greeley, Why Can't They Be Like Us? (New York: Dutton, 1971), pp. 90 and 92.

*The New York Times, January 28, 1974, p. 11.

**A poll of 15- to 21-year-olds taken in 1970 (the year of Kent State, the "student strike," etc.) for Life (January 8, 1971) by the Louis Harris organization showed that 90 percent said they were happy and 93 percent expected to be "as happy or even happier in the future."

prophecy" divisive effects in the area of ethnic pluralism, but they should be minor compared to the possible effect on scholastic achievement.*

The attitude some writers and educators seem to have about how children gather, interpret, and react to information, particularly regarding race, class, etc., is perhaps most surprising in regard to textbooks. One author feels that primary school reading textbooks which portray middle class life could lead to frustration and raise questions. In regard to underprivileged children:

> Are no other families as poor as ours? Does everybody else live in a pretty white house?....On the other side, is it desirable for the well-to-do children to be unaware that there may be poor people living on the other side of the tracks?**

Clearly one must challenge such premises. Children can and do identify with fanciful situations that have no relation to their lives. Fairy stories are always full of princes and princesses, knights in shining armor. Adventure stories are filled with larger than life characters doing spectacular things in strange places, etc. If educators were to claim that children were bored with current reading material and that there were no incentives to read it, one could find common ground with them. To be concerned, however, that small children will feel frustrated because of the position of a child they read about in a book, or that unless the book informs them, they won't learn about the "other half," seems extremely far-fetched. Small children, including most underprivileged, have innumerable sources of information (television, comics, movies, what they see from bus windows, stories by friends and family, etc., etc.). One also wonders why some educators can't give adequate weight to the purpose of having people in books be models of what schools (and most parents) hope their children will grow up to be. In some cases even this is thought to be wrong, however, if one so construes the gist of the content of a three-hour program on NBC on the night of January 9, 1975, entitled "Of Women and Men." Primary school reading texts were said to be conditioning little girls to fit into a male chauvinist world (which was bad!) and that textbooks could be rather effective in this mission today was apparently presumed to be the case. One is not too concerned about a (presumably unintentionally) somewhat frivolous prime time television show. That educators and others fantasize to the extent that they truly feel issues of frustration and growing up unaware of their own communities, etc., are significant, and even dominant, in selecting textbooks for small children, however, could bode ill for children in their care. It is interesting to note, for example, that a reading textbook with Negro children as characters also uses the "look say" teaching method, where whole words are to be recognized, rather than the "phonic" method where letters are sounded out. There are those who give some quite convincing arguments against the "look say" methods; it is a very ineffective method of teaching children with any degree of dyslexia. It is claimed according to HEW figures that "one third of that class will not learn to read through the look say methods." Yet because these books illustrate Negro children and slum conditions, Negro parents in Harlem chose the book,[*] and despite its shortcomings for both Negro and white pupils, a progressive approach may put this book in other schools.

---

*Such ethnic studies are bound to detract from the already reduced time available in the pupils' and teaching staff's day, which should be devoted to what concerns parents most--academic instruction in the basics. This program will probably merely provide another group of easy course electives which are likely to entice pupils away from more essential--and difficult--academic courses, the way "Art of Film"--watching movies--is likely to be chosen instead of literature in an English department, or sociology instead of history.

**Otto Klineberg, "Life is Fun in a Smiling, Fair-Skinned World," in Smiley and Miller, eds., Policy Issues, pp. 173 and 174.

One author cited earlier further states, "...the earliest impressions frequently develop attitudes that persist; it follows that it is never too early to tell children the truth."[**] One must question this "revisionist" attitude as a general premise, although not always dissatisfied with the output its proponents deliver in the real world.

As indicated earlier, one finds oneself at odds with these educators about giving young children these educators' view of the "truth" about our noted but mortal men and great but imperfect, system. One finds oneself in agreement with educators, however, on withholding from little children the fact that the wealthiest ethnic group in the country are the Jews, or that alcoholism is more prevalent among Gentiles, or that the vast majority of violent crimes in the United States is committed by Negroes, etc.

It is important to consider the attitudes reflected in the positions of educators mentioned above not only because they were so widespread (though perhaps still not held by a majority in the late 1960s and early 1970s) but because they largely reflect the attitude of the "activists," and in some instances only by understanding the way they viewed things can reasons for changes in the school system, that otherwise would be well nigh incomprehensible, at least be surmised. Their statements strongly indicate that many of these educators were probably at least as much social engineers as educators. Such an attitude tends to both downgrade the emphasis on scholastic achievement and increase the feeling of self-righteousness of those who espouse it. This in turn too often leads to a vigorous prosecution of the untried social reform programs and sliding over the difficult scholastic problems which they often generate, since it is all in a great cause.*

---

[*] Louise Clarke, Can't Read, Can't Write, Can't Talk Too Good Either: How to Recognize and Overcome Dyslexia in Your Child (New York: Walker, 1973), p. 207.

[**] Klineberg, "Life is Fun," in Smiley and Miller, eds., Policy Issues, p. 174.

---

*I sat in an open school board meeting in 1968 at which a mother, whose child was involved in a new cross-busing scheme, noted that her child had come home with a third grade reader in the fourth grade. The school superintendent said that this was to allow the new children in the class to catch up. The mother then asked how long this would continue. The superintendent replied, "I don't know, it may take a hundred years," which of course had nothing to do with the mother's question. At a still later period I talked to a teacher in a far-from-poverty-ridden, outlying suburb of New York City. In the course of the discussion I asked her what she thought students required, since there had been some question about the emphasis on reading, math and history skills, etc. She replied, "to learn how to survive in this world of pollution, wars...."

VIII. SUMMARY AND CONCLUSIONS

A. Expenditures and Product

The expansion of primary and secondary school inputs in the past two decades has been truly prodigious and over the last decade nothing less than spectacular. Figured in constant '73-'74 dollars (i.e., eliminating inflationary effects), the estimated average amount spent per pupil nationally in public primary and secondary schools in 1973-74--$1,281--approximates the average tuition per private university student in 1965 ($1,297).* Furthermore, many suburban high schools today charge the taxpayer a price per pupil almost equal to the current tuition at Ivy League colleges. Those who felt the keys to academic excellence were low student-teacher ratios, new buildings, large amounts of audio-visual equipment, new media centers, specialized teachers, high salaries, etc., have certainly had their day in court during the last decade. A greater proliferation of inputs to our school systems would be hard to imagine. We have spent about $61.6 billion on primary and secondary schools this past year.**

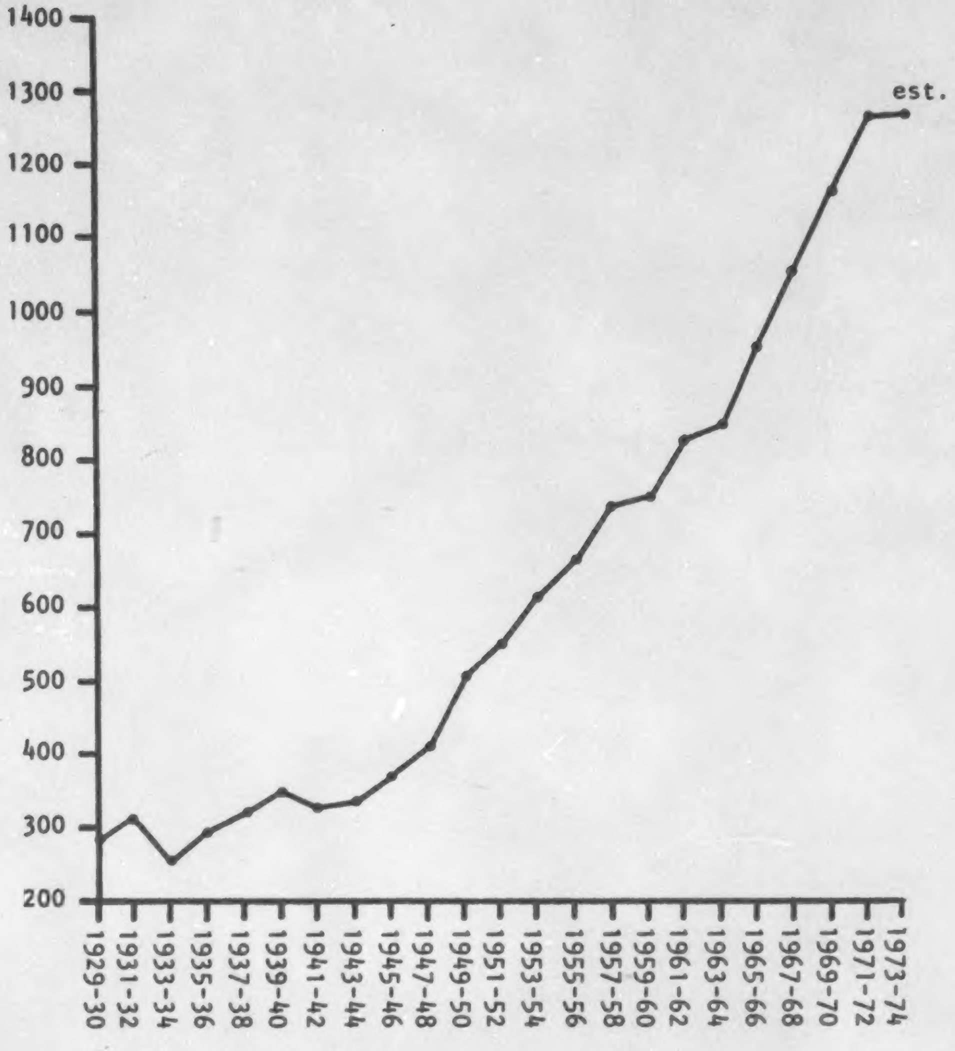
In fact, the quality of school systems is now usually measured by inputs such as those mentioned above. The following graph shows the annual cost of these inputs per public school pupil in constant dollars from the school year 1929-30 to 1973-74.

---

*Statistical Abstract of the United States: 1974, p. 136, table 225; Digest of Educational Statistics: 1974, p. 67, table 78.

**Statistical Abstract of the United States: 1974, p. 109, table 172.

TOTAL EXPENDITURES PER PUPIL IN AVERAGE DAILY ATTENDANCE
IN PUBLIC SCHOOLS, 1929-30 TO 1973-74*
(CONSTANT '73-'74 DOLLARS)

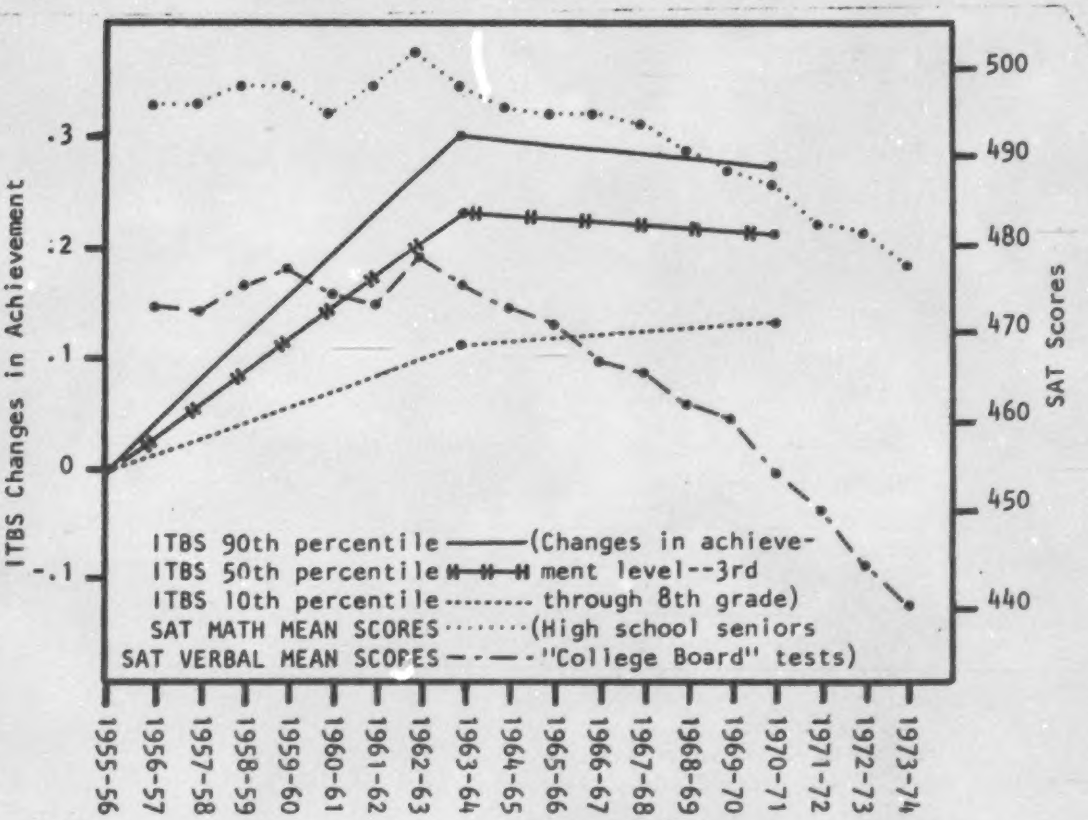


*See pp. 4-26 of this study.

U.S. Department of Health, Education, and Welfare, Digest of Educational Statistics: 1974, Publication No. NCES 75-210 (Wash.: G.P.O., 1975), p. 67, table 78

In contrast, superintendents, school board members and educators show little inclination to publicly discuss or disclose the outputs. Yet there are measurable outputs, and they tend to show a trend. The following graph is comprised of two sets of national test data (the renorming information for the Iowa Tests of Basic Skills and Scholastic Achievement--College Board--test data).

NATIONAL TRENDS IN STUDENT ACHIEVEMENT*



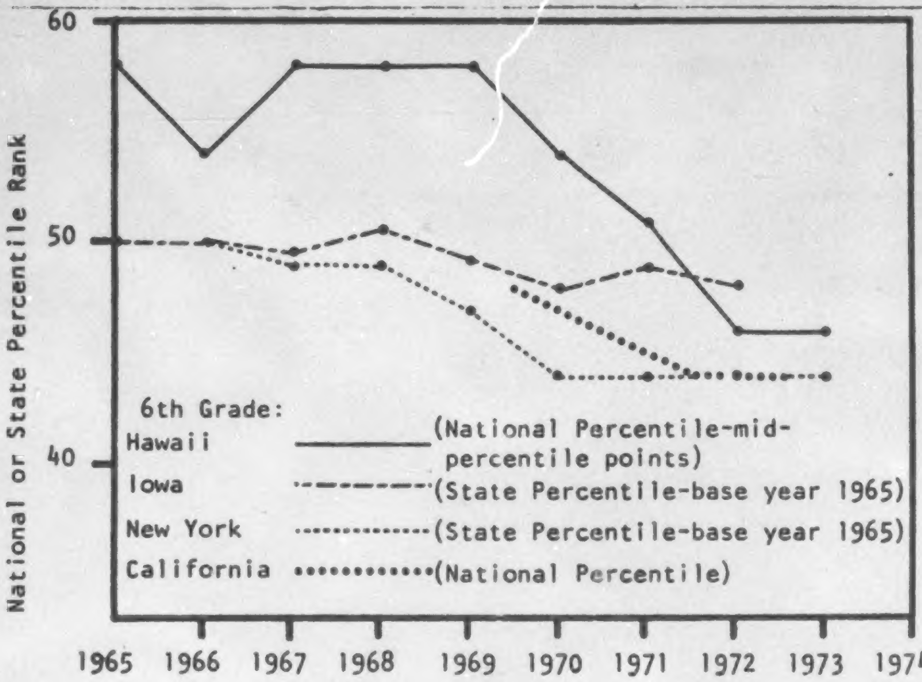
*See Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, pp. 30-40, and section B, "State and City Achievement Test Evidence Over the Recent Past and an Interpretation of Trends in Academic Achievement in General," pp. 71-76.

SAT Scores: College Entrance Examination Board, New York, New York

ITBS Data: Reprinted from A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills, p. 67, table 6.8, "Summary of Differences in 1956, 1964 and 1971 Editions of Norms for Pupil Scores" (Boston: Houghton Mifflin, 1974), with permission of the authors and the publisher

With a few exceptions, state achievement data seem to show a similar decrease in achievement levels over time. (See the Appendix.)

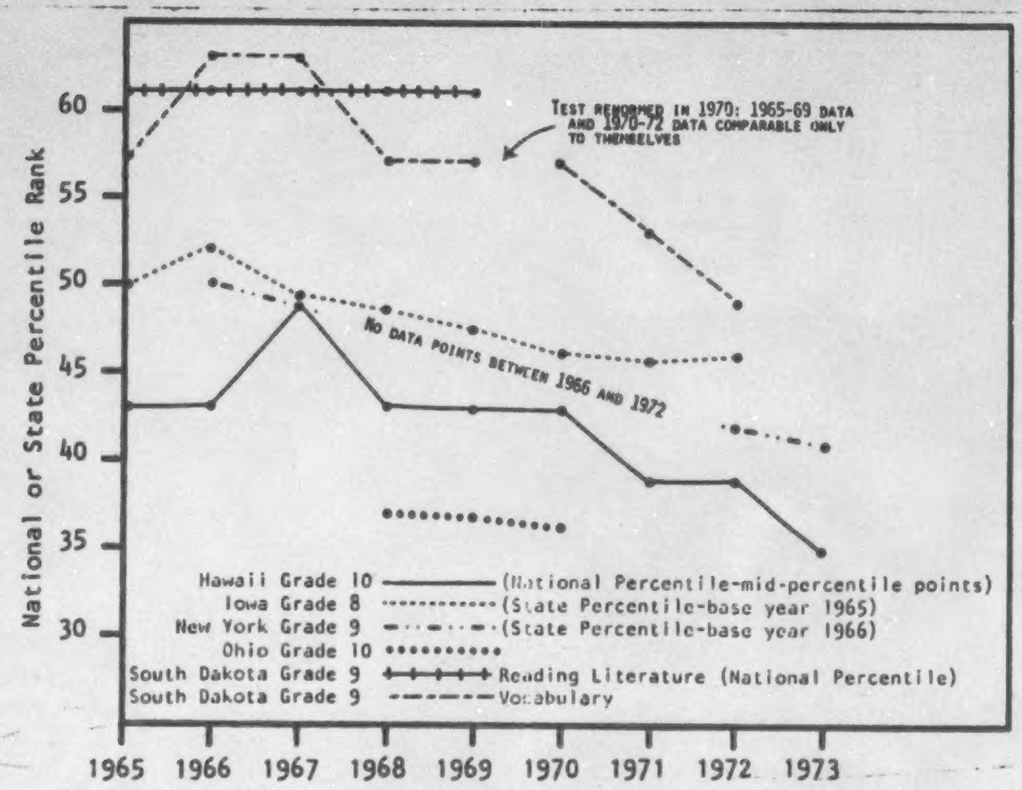
READING ACHIEVEMENT SCORES OF SIXTH GRADES, 1965-1973*



*See pp. 53-54 and the Appendix, pp. 3-7, 16-17, 20-22 and 37-43, by Paul J. Bracken.

Summary Report of Statewide Testing Program 1972-1973, Report No. 83, Office of Instructional Services, Evaluation Section, Hawaii State Department of Education, October 1973; Iowa Basic Skills Testing Program, The University of Iowa; The University of the State of New York, State Education Department, Bureau of Testing and Advisory Services, Pupil Evaluation Program; California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1974

READING ACHIEVEMENT SCORES OF EIGHTH THROUGH TENTH GRADES, 1965-1973*

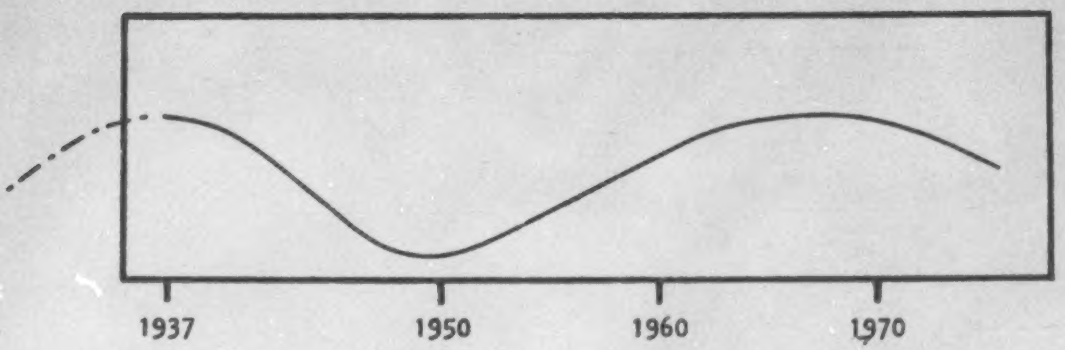


*See pp. 53-55 and the Appendix by Paul J. Bracken, pp. 16-17, 20-22, 37-43, 46 and 49-50.

Summary Report of Statewide Testing Program 1972-1973, Report No. 83, Office of Instructional Services, Evaluation Section, Hawaii State Department of Education, October 1973; Iowa Basic Skills Testing Program, The University of Iowa; The University of the State of New York, State Education Department, Bureau of Testing and Advisory Services, Pupil Evaluation Program; Statewide Reports, Ohio Survey Tests, 1968-1973, Ohio Testing Services, State Department of Education; Iowa Tests of Educational Development, Guidance and Counseling Service, Division of Elementary and Secondary Education, Pierre, South Dakota

Generally, we seem to be experiencing a nationwide academic achievement decline, and not for the first time in this century. The data seem to indicate that there is likely to have been a cyclical achievement trend at least over the past four decades which looks approximately as follows:

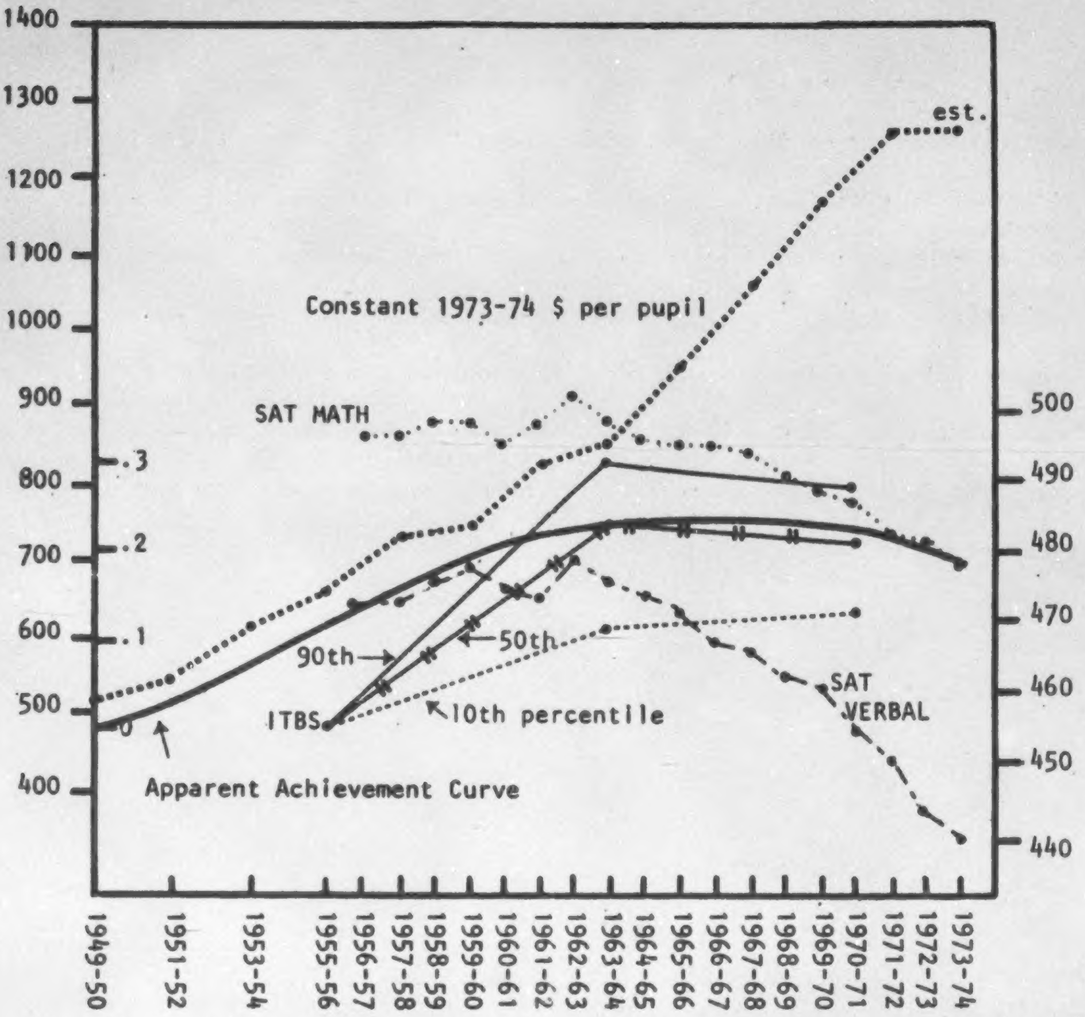
APPARENT CYCLICAL ACHIEVEMENT CURVE*



*See Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, and section B, "State and City Achievement Test Evidence Over the Recent Past and an Interpretation of Trends in Academic Achievement in General."

John C. Flanagan and Steven M. Jung, Progress in Education: A Sample Survey (1960-1970) (Project Talent), 2d ed. (Palo Alto, Calif.: American Institutes for Research, September 1972); William B. Schrader, "Test Data As Social Indicators," Educational Testing Service, Statistical Report No. 68-77, September 1968, Princeton, New Jersey; Joseph R. Sligo, "Comparison of Achievement in Selected High School Subjects in 1934 and 1954 (Ph.D. diss., State University of Iowa, 1955), p. 153; Mabel E. Boss, "Reading, Then and Now," School and Society 51 (1940): 62-63; Elizabeth L. Woods, unpublished data from the Division of Psychology and Research, Los Angeles Public Schools, Los Angeles, California, as cited in J. Raymond Gerberich, "The First of the Three R's," Phi Delta Kappan 33 (1952): 346; Percy R. Davis and M. Evan Morgan, A Balanced Educational Program for Santa Monica (Santa Monica, Calif.: Board of Education, 1940) as cited in Gerberich, p. 346; College Entrance Examination Board, New York, New York; A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974), p. 67, table 6.8, "Summary of Differences in 1956, 1964 and 1971 Editions of Norms of Pupil Scores"

While the usual concern about possible financial neglect of the schools over these periods of achievement slump is laudable, it is not necessarily explanatory: evidently in the 1940s, as expenditures rose, achievement declined. On the other hand, as expenditures continued to increase in the 1950s, achievement rose. Another divergence seems to have occurred in the mid-sixties. A composite graph of approximate achievement and expenditure trends shows that when the spurt in spending rate per pupil (in constant dollars) began its steepest climb, achievement began to fall.



Apparent Achievement Curve: John C. Flanagan and Steven M. Jung, Progress in Education: A Sample Survey (1960-1970) (Project Talent), 2d. Ed. (Palo Alto, Calif.: American Institutes for Research, September 1972; William B. Schrader, "Test Data as Social Indicators," Educational Testing Service, Statistical Report No. 68-77, September 1968, Princeton, N.J.; from Joseph R. Sligo, "Comparison of Achievement in Selected High School Subjects in 1934 and 1954" (Ph.D. Diss., State University of Iowa, 1955), p. 153

SAT Scores: College Entrance Examination Board, New York, New York

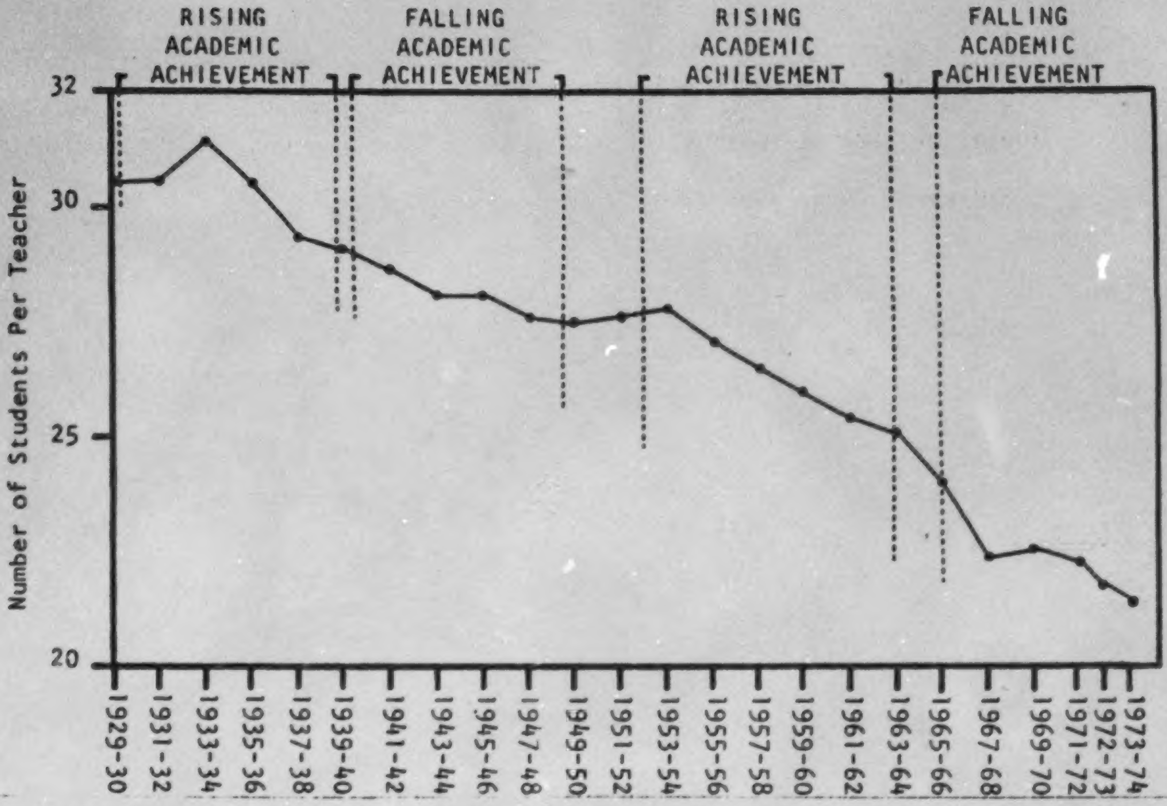
ITBS Data: A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills, p. 67, table 6.8, "Summary of Differences in 1956, 1964 and 1971 Editions of Norms for Pupil Scores" (Boston: Houghton Mifflin, 1974)

Per Pupil Expenditure: U.S. Department of Health, Education, and Welfare, Digest of Educational Statistics: 1974, Publication No. NCES 75-210 (Wash.: G.P.O., 1975), p. 67, table 78

As the following graph demonstrates, statistical data on such costly inputs as student-teacher ratio show no correlation to this cyclical achievement curve over time.*

---

*See p. 14 of this study for a discussion of the difference between student-teacher ratio and average class size.



*Graph based on data from pp. 15, 77 and 78.

U.S. Department of Health, Education, and Welfare: Digest of Educational Statistics: 1973, Publication No. (OE) 74-11103 (Wash.: G.P.O., 1973), pp. 33-35; Statistics of State School Systems: 1969-70, Publication No. (OE) 74-11421 (Wash.: G.P.O., 1973), pp. 5 and 7; Statistics of Public Elementary and Secondary Day Schools: Fall 1972, Publication No. (OE) 73-11402 (Wash.: G.P.O., 1973), pp. 12, 14 and 16

John C. Flanagan and Steven M. Jung, Progress in Education: A Sample Survey (1960-1970) (Project Talent), 2d ed. (Palo Alto, Calif.: American Institutes for Research, September 1972); William B. Schrader, "Test Data As Social Indicators," Educational Testing Service, Statistical Report No. 68-77, September 1968, Princeton, New Jersey; Joseph R. Sligo, "Comparison of Achievement in Selected High School Subjects in 1934 and 1954"(Ph.D. diss., State University of Iowa, 1955), p. 153; Mabel E. Boss, "Reading, Then and Now," School and Society 51 (1940): 62-63; Elizabeth L. Woods, unpublished data from the Division of Psychology and Research, Los Angeles Public Schools, Los Angeles, California, as cited in J. Raymond Gerberich, "The First of the Three R's," Phi Delta Kappan 33 (1952): 346; Percy R. Davis and M. Evan Morgan, A Balanced Educational Program for Santa Monica (Santa Monica, Calif.: Board of Education, 1940) as cited in Gerberich, p. 346; College Entrance Examination Board, New York, New York; A. N. Hieronymus and E. F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974), p. 67, table 6.8, "Summary of Differences in 1956, 1964 and 1971 Editions of Norms of Pupil Scores"

High academic achievement was apparent in the mid-1930s, when the average number of pupils per teacher was over thirty.[*] As the number decreased in the 1940s, academic achievement also fell. When it rose slightly in the early 1950s, achievement apparently also began to rise, but in the mid-1950s these trends diverged when the number of students per teacher began to fall again and academic achievement continued to rise. As the plunge in student-teacher ratio continued, becoming somewhat precipitous in the mid-1960s, achievement began to decline and continued to do so through 1973.[**] Although data do not support the argument that lower student-teacher ratio improves the quality of education, it continues to be treated as though it does.[***]

Perhaps one should point out in passing that the premise that lower student-teacher ratio will improve the quality of education assumes that all teachers will be of equal quality, regardless of the increase in the instructional personnel pool. At some point along the expansion curve, this could become increasingly risky: in other areas of expertise, as numbers go up, the probability of each additional recruit being equally qualified normally diminishes. If a similar drop in skill and dedication also occurs for teachers at some point along the expansion curve, one can logically see a possible explanation for achievement scores dropping as the number of teachers for a given number of pupils increases. (Clearly, if a very good teacher is instructing a class of thirty pupils, there is no reason to be sure that the average achievement score will increase if the class is split in two, and half the students are transferred to a much less competent teacher.) In any event, within the limits of class sizes as we know them, one is forced to retreat to the position that student-teacher ratio per se and academic achievement have no clearly demonstrable relationship. Some other variables evidently dominate. Data also show no proven relationship between teachers' salary levels, age of buildings, etc., and achievement.[*] Furthermore, as indicated earlier, the decrease in student-teacher ratio does not necessarily indicate a similar drop in class size. Too often it merely means a relay of teachers, even in the lowest grades, who shift the same size class to one another, or relieve the classroom teacher one period a day.[**] "Specialist" teachers, e.g., remedial reading teachers, also relieve the classroom teacher of a former chore--helping slow learners after regular school hours. (Once considered the classroom teacher's job, the division of responsibility for teaching a child to read is questionable. Teachers' aides and parents, as well as remedial reading teachers, now are also expected to be responsible for this task. One is reminded of the saying that something which is everybody's responsibility is nobody's responsibility.)

---

[*] See Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, and section B, "State and City Achievement Test Evidence Over the Recent Past and an Interpretation of Trends in Academic Achievement in General" for academic achievement data.

[**] Incidentally, Arizona achievement data (the Appendix, Paul J. Bracken) contain mean reading scores for third grade pupils by class size, which again show no correlation between class size per se and achievement scores, except that coincidentally, I am sure, the highest mean raw reading scores occurred in the largest classes, the highest by far in classes of forty to forty-five children.

[***] "New York has the lowest pupil/educator ratio. The state has made a massive investment in reducing class size in order to raise quality." The Fleischmann Report, v. I, p. 12.

---

[*] See pp. 163-167 of this study. See also Jencks, Inequality, pp. 94-96; Idem., "The Effects of High Schools on Their Students," Harvard Center for Educational Policy Research, 1972; New York City School Fact Book, 2d ed., Institute for Community Studies, Queens College, City University of New York, 1972, pp. iii and iv; Coleman, Equality of Educational Opportunity, pp. 218-230 and supplementary Appendix 9.10. Also note the achievement levels vs. class size for Arizona on pp. 1-2 of the Appendix by Paul J. Bracken.

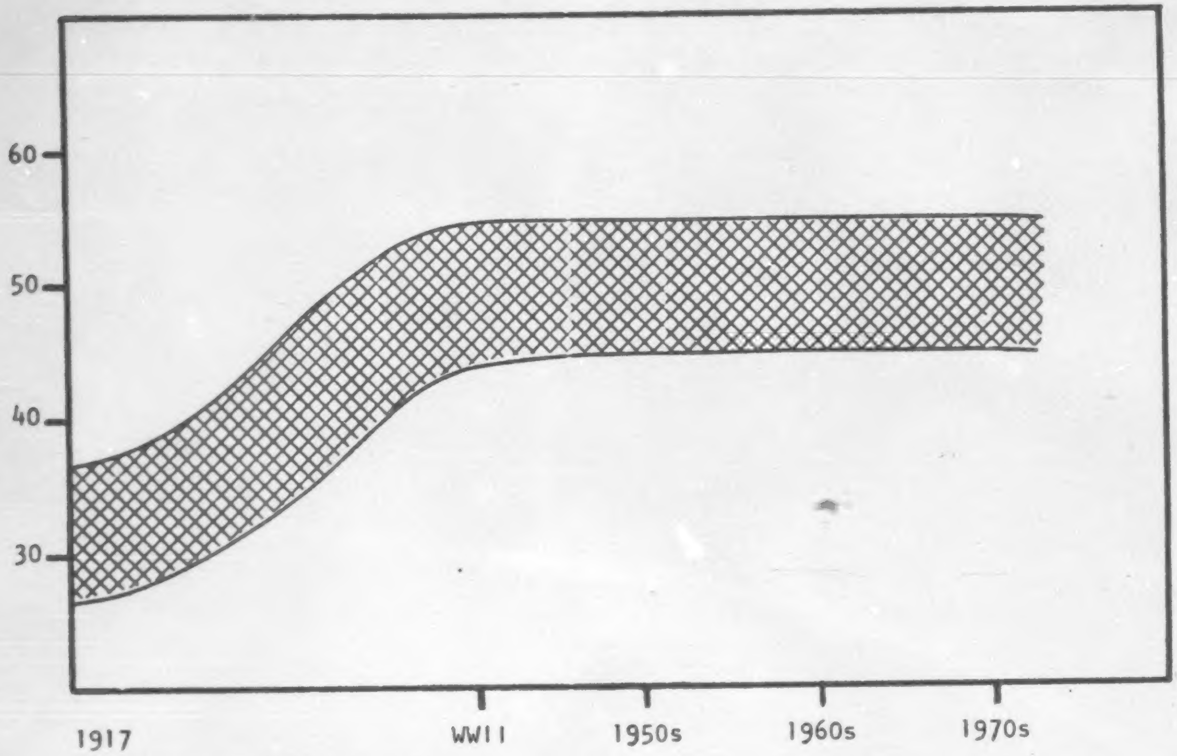
[**] Full-time art, music and gym teachers as well as librarians (who read stories to classes of children daily) are now found in kindergarten through fourth grade schools.

The inflationary and otherwise undesirable effect of this continuously increasing yearly per pupil expense and the continuing drop in the measure of school productivity, i.e., academic achievement, are reaching very worrisome levels. Our educational system seems at least inefficient, if not downright wasteful. The yearly expenditure on education, including higher education, is approaching one out of every twelve dollars of the entire GNP, or close to $100 billion. Almost all of the $61.6 billion spent on primary and secondary education is extracted from the citizenry as taxes. Much of the balance is spent on private schools by parents who feel they can no longer entrust their children to the public school system. At the very time when the average citizen is beginning to feel hardships from spiraling taxes and other costs of education, it cannot be shown that additional expenditures are helping children to learn.

B. Factors Exterior to the School

Although direct causes for fluctuations in academic achievement outside the school system itself may exist, they are hard to find. The "national IQ" (based primarily on IQ scores of military-age men), as best we can ascertain, seems to have held relatively constant until 1970.

MENTAL COMPETENCE OF MEN OF MILITARY AGE*



*See Chapter IV, section A, "IQ Evidence from World War II to the Present" by Paul J. Bracken, and section B, "Some Interpretations of IQ Data."

U.S. Army, Army Research Institute, AFQT test data, World Wars I and II, 1955, 1962 and 1970; also based on data from Read D. Tuddenham, "Soldier Intelligence in World Wars I and II," The American Psychologist 3 (1948): 54-55

Counting forward about five years from the time of Armed Forces Qualification Test score recordings for men of military age should show the approximate trend in mean high school mental ability for those earlier years.

California pupil IQ scores show a decline after 1970, with the seventy-fifth percentile (the most intelligent pupils) in both sixth and twelfth grade falling faster than the twenty-fifth percentile.* If California

---

*See Chapter IV, section A, "IQ Evidence from World War II to the Present" by Paul J. Bracken, pp. 94-95.

IQ and/or academic achievement dropped prior to the 1969-70 school year, we have no data to so indicate; our information begins with that year. (We also have no way of knowing which came first--the drop in IQ or in academic achievement.) As indicated earlier, there seems reason to believe that California is not unique among the states in this IQ drop.* Tests in Iowa and New York State show that a drop in achievement began in 1967, whereas the decline apparently started in 1969 in Hawaii. Only West Virginia data show both aptitude and achievement levels stable according to the same test vehicles for several grades over a period of several school years, from 1970-71 to 1973-74.

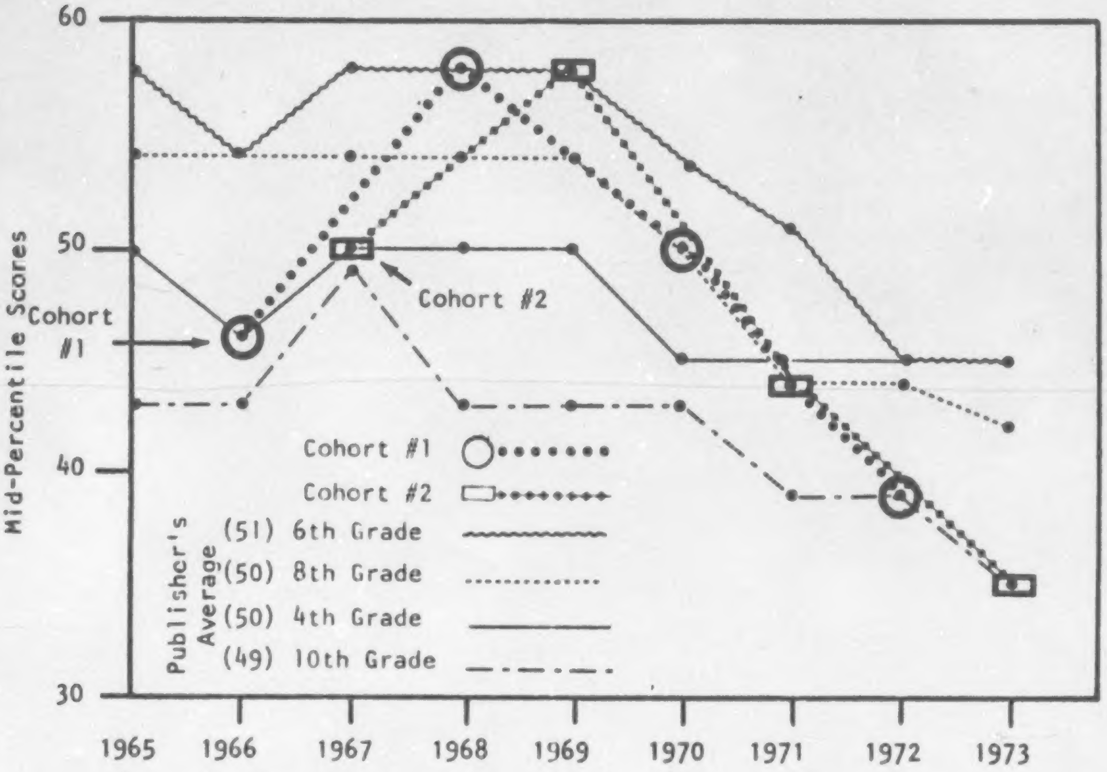
Data cited previously, though, tend to undermine one theory. Since all upper grade achievement levels generally dropped simultaneously while lower grades held firm, the theory of an inherently less talented cohort moving through the school system becomes less convincing. Furthermore, as depicted in the following graphs, the fact that two statewide cohorts taking the identical test in one grade in different years show identical competence, and then show greatly changed competence later taking identical tests in a higher grade in different years, also calls into question the idea that the decline in inherent IQ has triggered the decline in achievement. In some cases, one cohort tested superior to another in lower grades only to test inferior to the same cohort in a higher grade; however, the grade achievement trace had declined between the time the first "inferior" cohort took the test in the higher grade and the time the initially "superior" cohort took the same test.

---

*See p. 96 and the Appendix by Paul J. Bracken.

READING SKILL PROGRESS OF PUPIL COHORTS AND TRACES OF READING ACHIEVEMENT SCORES FOR THE FOURTH, SIXTH, EIGHTH AND TENTH GRADES, HAWAII, 1966-1972*

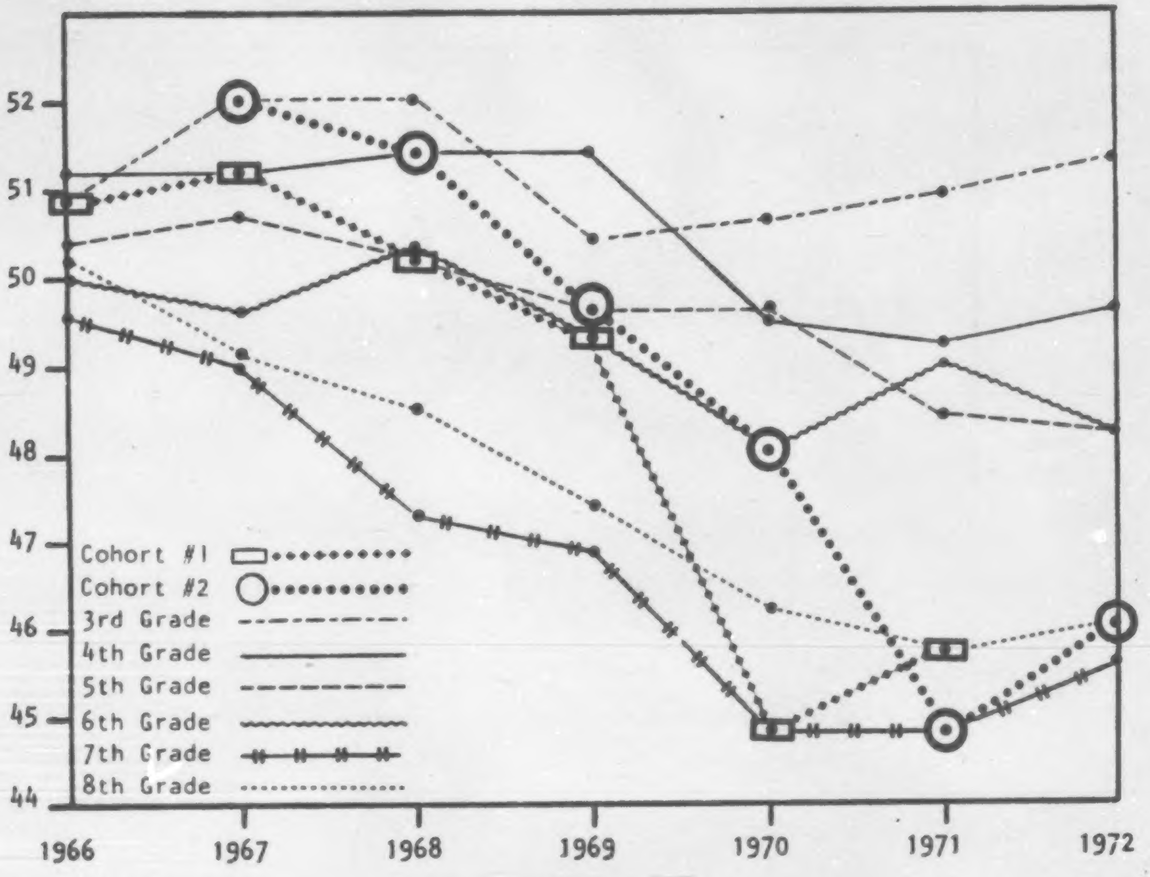
(MID-PERCENTILES)



*See the Appendix by Paul J. Bracken, pp. 16-17.

Summary Report of Statewide Testing Program 1972-1973, Report No. 83, Office of Instructional Services, Evaluation Section, Hawaii State Department of Education, October 1973

READING SKILL PROGRESS OF PUPIL COHORTS AND TRACES OF READING ACHIEVEMENT SCORES FOR THIRD THROUGH EIGHTH GRADES, IOWA, 1966-1972*
(1965 "BASE-YEAR" PERCENTILE RANKS**)



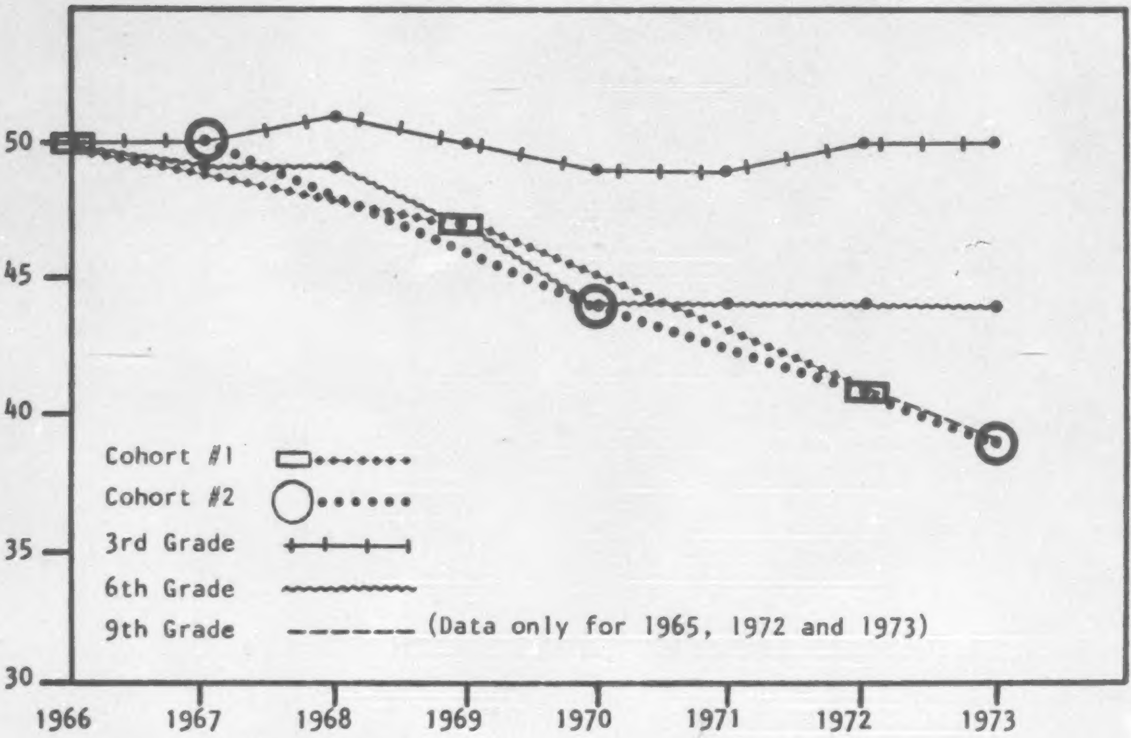
*See the Appendix by Paul J. Bracken, pp. 20-22.

**The fiftieth percentile point for each grade in 1965 is the starting point.

Iowa Basic Skills Testing Program, The University of Iowa

READING SKILL PROGRESS OF PUPIL COHORTS AND TRACES OF READING ACHIEVEMENT TEST SCORES FOR PUBLIC AND PRIVATE SCHOOLS, THIRD, SIXTH AND NINTH GRADES, NEW YORK STATE, 1966-1973 *

(PERCENTILE RANK OF MEDIAN RAW SCORES, PUPIL EVALUATION PROGRAM, BASE YEAR 1965)



*See the Appendix by Paul J. Bracken, pp. 37-43.

The University of the State of New York, The State Education Department, Bureau of Testing and Advisory Services, Pupil Evaluation Program

Minnesota data show a drop in aptitude scores for a couple of years after 1949* but achievement fell steadily from 1939 through 1948, when we have no evidence that mental ability decreased; our data for two states seem to indicate that it remained constant.** Although it is conceivable that a drop in school systems' academic excellence could eventually trigger a decline in IQ, there is no evidence that a significant drop in IQ triggered the 1939-1949 achievement slump.

Nor do we find any particular socioeconomic factors exterior to the school system which seem to have worsened significantly in the 1963-1970 period as compared to the 1955-1963 period, times of significantly different achievement, according to the Iowa Tests of Basic Skills data cited earlier.*** Spendable weekly income was rising and unemployment was generally down in both periods. Furthermore, increased spending on great society programs as well as on established older programs such as federal housing, improved conditions for the lowest income families in the late 1960s. As we have seen, academic achievement peaked during the Great Depression and declined in the relatively affluent period of the 1940s. Also, as indicated above, cohorts of children can move down (and sometimes even up) in average achievement (compared to other previously labeled equally competent cohorts, as measured in percentile level for their grade) in so short a time period (a year or two) that the socio-economic and IQ status factors extrinsic to the school could not possibly have changed accordingly for whole state cohorts.* Other trends also cast doubt on the socioeconomic deprivation theories about academic achievement declines. Renorming of a national achievement test for third through eighth graders shows that the 1964-1971 decline was sharpest among pupils in the ninetieth percentile (upper tenth percentile) achievement bracket,** in California (1969-1973) among the seventy-fifth percentile (upper twenty-fifth percentile) of twelfth grade students*** and, as indicated by New York State data, apparently among pupils outside great city slums**** (though as yet these cities are normally still below other areas in their states). These ninetieth and seventy-fifth percentile pupils are the most likely to be offspring of parents with higher education, higher IQs and higher income homes, where shelves of books (often including encyclopedias) are readily available. These students are also the most likely to travel and be exposed to people who use better grammar and broad vocabularies, etc. Some achievement scores in big cities may show less decline than in the suburbs simply because core city scores are so low to begin that they cannot decline much further (particularly on multiple choice tests). Nationally, however, this bottoming out explanation may not suffice. The renorming scores for the Iowa Tests of Basic Skills showed improvement in 1964-1971 scores for the lower tenth percentile group (whose members currently show up among the poor in greater percentages than elsewhere)--a rise of only 0.2 months compared to 1.1 months in the 1956-1964 period, but rising nevertheless--while the ninetieth and fiftieth percentiles were declining.*

---

*See Chapter IV, section A, "IQ Evidence from World War II to the Present" by Paul J. Bracken, p. 94.

**See Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, pp. 41-45.

***Ibid.

---

*See pp. 63-70.

**See Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, pp. 41-45.

***See pp. 58-59.

****See the Appendix by Paul J. Bracken, pp. 37-43.

Furthermore, as we have seen, the longitudinal evidence from our almost century-old, universal compulsory public school system tends to cast doubt on the excessive emphasis on socioeconomic factors, per se, when looking for factors which influence learning the "three Rs." The system has demonstrated its ability to educate children from all socioeconomic and ethnic backgrounds in the fundamental verbal, mathematical and physical and social science skills. Nor did severe depressions or vast inroads of non-English-speaking immigrants halt or disastrously disrupt its primary educational function. Moreover, the system has shown itself capable of teaching under conditions of crowding and deprivation which no one would dream of asking educators to accept today.**

Whether "sociopolitical" factors might have affected schools is much harder to judge. The recent very permissive environment, particularly in larger cities, was not visible in the 1940s academic decline, although the environment may have been more permissive than in the 1930s.

Changes in societal attitudes of some groups may have had some effect on the operations of the school system. This seems particularly likely in view of the current fashionable attitudes of "new morality" and rejection of traditional values which have been accepted so often by the entertainment and news media. As we have seen, much of the public milieu in which children are now raised tends to undermine the fundamental principles which were once considered the foundation for all types of endeavors. This type of public legitimization of bad grammar, vulgarisms, and even lascivious behavior, is clearly more prevalent today than previously. Magazines, records, movies, and even television shows which depict, and often champion, highly questionable mores, are widespread, apparently often sanctioned by many adults normally considered authority figures. They are available to youngsters; some are specifically directed to the teenage market. Fashions in clothes, language and grammar in movies, television (including commercials) and music seem to be legitimizing this trend toward vulgarization.

---

*See Chapter III, section A, "A Longitudinal Study of Academic Achievement Levels" by Paul J. Bracken, pp. 41-45.

**See pp. 106-109.

It should be recalled, however, that similar though less intense periods of loosening of constraints in parts of the milieu in which children lived occurred in the 1890s and in the 1920s. Yet during these periods, educators, probably supported by parents, seem to have been more successful in keeping undesirable effects of the changing milieu out of the schools. In any case, we have no evidence to suggest that primary and secondary schools were plagued with problems as severe as those they face today. Regardless of extra-school milieu, traditionally schools have staunchly maintained the positions of islands of scholastic and civilized environment. The products of the schools in the first decade of this century, though exposed to extreme deprivation at home, proved to be sufficiently educated to move, or to assist their children to move, up the socioeconomic ladder.* Moreover, available data indicate that the current attitudes of the majority of parents toward how they want their children to learn, to behave and to study, have probably not changed greatly, at least not in the past twenty years.* In addition, the much publicized "generation gap" of the sixties seems to have been basically little different than that of the 1950s.** Changed family attitudes and home environment thus seem inadequate explanations for the achievement decline, particularly considering the rapid drop in achievement of whole state cohorts, upper percentile brackets and in northern suburban and rural school districts.

---

*See pp. 118. 119, 185, 186.

C. The Schools and the Educators' Attitudes

The evidence tends to lead one to consider the hypothesis that the problems of education are more likely to originate from forces within the schools than from outside factors. It is hard to judge why the questionable aspects of the current environment permeated the schools, but perhaps at least a contributing factor was the same one which may have caused academic demands to be reduced: a loss of perspective by educators. Perhaps the same educators who, in my opinion, lost perspective somewhat in the area of achievement, may have also lost it in regard to adequate discipline. Language, dress and behavior which formerly would have been deemed unacceptable are allowed in our schools today; sometimes they actually seem to be encouraged under the guise of a new "cultural" expression. In any event, many schools, particularly those in core cities, have become so chaotic (and some dangerous) that the educational process can hardly be conducted. Which teaching technique or curriculum is used is virtually irrelevant: very little teaching or learning can be accomplished under these conditions.

---

*See The Gallup Poll: Public Opinion 1935-1971, 1st ed., 3 vols. (New York: Random House, 1972), v. 2, 1949-1958, pp. 1281, 1282, 1364, 1514, 1581, 1582; v. 3, 1959-1971, pp. 1587, 1612, 1715, 1791-1792. See also The Gallup Opinion Index, No. 87, September 1972, as reproduced on pp. 188 and 189.

**See Armbruster, The Forgotten Americans, pp. 190-194 and 238 for data derived from Purdue Opinion Panel polls of high school pupils over the years.

This current lack of orderliness and less than well-structured approach to education, is not, however, confined to core city schools. Many schools, including private schools, in more affluent suburbs and small cities suffer from this malaise. Furthermore, skilled, thoughtful creativity seems often to be sacrificed for spontaneity and pupil "involvement." Perhaps most disquieting about the new politics of current schooling is the contention of many educators that school children should be treated as adults: children's judgment on the gamut of issues from curriculum to behavior is the ostensible rationale for change. It is difficult to dismiss the suspicion that this approach is self-serving for teachers as well as pupils. A child's objection to homework or learning the multiplication tables is likely to stem from dislike of demanding work, while the teacher's rationalizations are all too often apt to stem from aversion to teaching difficult subjects, remaining after school to help pupils and correcting homework, weekly tests and compositions.

Our current educational difficulties may therefore stem from some fundamental problems which perhaps should be confronted. First, our primary and secondary universal compulsory educational system has evolved over a period of almost a century into a highly sophisticated and effective mechanism suited to our unique society. This system nonetheless can be operated by people lacking superior talents, if they adhere to the standard operating procedures. Recent experience suggests that productivity quickly declines when the system's operators tamper with the fundamental processes of this highly complex machine. It is doubtful whether many men today completely understand the ramifications of the various factors in the educational process; even fewer would be brilliant enough to make radical changes in the fundamental processes which would prove beneficial. Gradual, often minor improvements and increased pupil time in school within the normal structure and process alone seem to have fostered the system's growth. Radical, ill-conceived change seems to cause the machine to labor and lose momentum.

We must consider another possibility. Many primary and secondary school educators, once numbered among the most responsible of the educated (after clergymen and perhaps doctors), may, at least from the traditional viewpoint, no longer fit that evaluation. Though educators are still second only to doctors in inspiring public confidence,* many may no longer appreciate the gravity of their obligation to teach children fundamental scholastic disciplines and techniques of conducting intellectual activity, skills essential in seizing opportunities in employment and higher education. Unfortunately, some evidence suggests that this may be the case. It matters little to the short term whether this attitude stems from educators' genuine belief that the academic disciplines no longer deserve the priority they once enjoyed, or from teachers' complaints that the old curriculum is too demanding. More important is that, for whatever reason, our implicit trust in many educators may not be well founded, and furthermore, this problem may be more difficult to solve than the one in the 1940s. But solve it we must. Perhaps the most important first step is to convince those with the final responsibility that a problem truly exists.

---

*The Harris Surveys, though showing a fluctuation in confidence in all types of people in places of responsibility, showed those in charge of education second only to those in charge of medicine. National Opinion Research Corp. surveys (1973 and 1974) support this ranking. The Harris Survey, November 13, 1972; The Harris Survey as reported in Confidence and Concern: Citizens View American Government, A Survey of Public Attitudes by the Subcommittee on Intergovernmental Relation of the Committee on Government Operations, U.S. Senate, Part 2, December 3, 1973.

D. The Policy Makers and the Need for Information

Even the Federal Government's education specialists may not be aware of the extent of the problem, primarily because they apparently do not collect achievement data. Billions of federal dollars, much for primary and secondary education, are dispensed without requiring any evidence of the resulting output. Although state education departments are aware of this problem, local school districts traditionally have been independent and control the majority of the money spent on their schools. These local school boards seldom ask state officials or local superintendents for (and seldom know anything of) trends in their own district's achievement level. When board members do hear of problems in the state, they generally perceive them as being in districts other than their own, particularly in any existing core city areas, which are thought to be lowering the state's educational standards. Sometimes changing school population is blamed. State departments of education usually seem to have tended toward the fashionable progressive attitude of the sixties. Their considerable power of the purse seems not to have been used as leverage on local school districts to raise academic achievement levels, as it was used to enforce such standards as racial balance.

It is perhaps understandable that local boards did not ask about academic achievement during the 1960s. They were acting on the traditional assumption that highly responsible educators were in charge; most educators seldom, if ever, publicly mentioned achievement trends at this time. School boards have traditionally worried about raising money and allocating budgets, rather than about whether children were being taught the fundamentals. Such questions were considered to be within the domain of the trustworthy educators. This assumption was becoming questionable by 1970, as it had been in the 1940s. School boards today must learn something about education and how to measure schools' outputs. They can no longer limit themselves to following the advice of professional educators as to what constitutes "quality education." Furthermore, these boards must not confine their attention to their own districts; awareness of national and state trends is essential if they are to avoid being misled by references to "changing pupil population."

The Federal Government clearly has the responsibility to maintain at least state-by-state (and possibly district-by-district) achievement data on schools which receive so much federal money. A branch of the Office of Education (HEW) such as the National Institute of Education should keep comprehensive, up-to-date longitudinal data on academic achievement in school districts receiving federal money. The collection and mere examination of such data could be most valuable. For example, when the problem was discovered in the 1960s in core city slum schools, it was apparently thought by many to be a city problem, a problem of the underprivileged, etc. Indeed, large amounts of Title I and other federal, state and local money were spent to treat this "ghetto" problem. But a glance at state and national data since the second half of the 1960s clearly shows that our entire primary and secondary school system was--and is--in jeopardy. Tax money (and much parochial school effort) was poured in to patch what were considered by many to be a few localized leaks, when in actuality the seams of the entire hull were giving way. The whole ship of education continues to founder despite vast amounts of money and effort expended to cure the local symptoms of a much broader problem.

Achievement data collected on the federal level would probably also be useful in more definitive decisions, for instance, stipulations to be made when financial grants are allocated to school districts. Thus the Office of Education would have to determine, by checking its programs and others against achievement data, which practices, etc., have not improved the teaching and learning processes. In addition to saving money, this approach hopefully would divert educators' attention from less demanding and often counterproductive programs and force them again to consider time-tested, effective curricula and methods.

E. The Depth of the Problems

Should this current slump in our primary and secondary educational system continue, we may find that "going back to the fundamentals" will be more difficult than before. Students today in public and private school systems, in affluent suburbs as well as core cities, often are unaware of their lack of skills. In verbal skills, for example, such students are poor in organizing and articulating concepts and ideas, particularly in written form; they often suffer considerable frustration trying to express subtle, intricate ideas. These students often do not realize that the necessary skills for such oral and written expression can be acquired without excessive difficulty; indeed they were once normally acquired in primary and secondary schools.

This problem could become acute when in the future teachers are sought who know that such skills are available. Unfortunately, too many teachers today apparently share some of these shortcomings with their pupils; one fears that teachers' colleges have been producing large numbers of such teachers in recent years. Nor is there much basis for hope that this situation will soon improve. As indicated earlier, college textbooks are now to be written at the level of junior high school verbal skills, with "fewer abstractions and more repetition of concepts," and though the better schools are less likely to get these texts soon, some four-year schools will begin using them in the near future.* One fears that state teachers' colleges (seldom considered "good schools") will be among those receiving these texts early. We may, however, also have similar problems with inadequately grounded mathematics and science teachers, and perhaps with social studies teachers, should we attempt to have this group teach history and geography.

The lack of computational ability and the confusion which exists among many pupils in the lower grades who have been exposed to the "new math" are startling. Student inability to compute, however, is not as surprising as the apparent lack of understanding among some educators that children not only can be taught to compute; they must be taught to compute. The New Jersey summary of state achievement test results, 1972-1973, says about multiplication and division in the fourth grade:

---

*The New York Times, November 7, 1974, p. 47.

> Particularly low achievement was noted throughout this cluster. There was some question by committee members as to whether the students are "ready" for these items at this grade level.*

Pupils' inability to compute has already had some effect on decisions about teaching math. As we have seen, set theory and other new math approaches are being abandoned, and old methods of teaching computational skills restored in some large school systems.**

This deviation from the standard method of teaching math might not have been only confusing to many children, but beyond many teachers' competence. In any event, since computational ability plummeted along with other skills during the period when new math flourished, we have no evidence that, at least in the current school milieu, this technique produced significant positive outputs. Nor have we any evidence which suggests that the new approach to social studies was generally successful. On the contrary, skills in social studies also declined during the application of these teaching approaches. Combining such subjects as geography, history, current events, etc., into one subject in the lower grades is questionable. Expanding single courses in high school (which drastically increases the scope in time, geographic area, etc.) while simultaneously trying to make everything relevant, is probably beyond many teachers' competence. In any case, these innovations have apparently failed to increase academic achievement. Some of the effects of attempting this superficial coverage of vast areas of time and space in social studies seem obvious from achievement scores. But one wonders whether new teachers trained for these courses possess the depth of knowledge required to teach, for example, a solid course in ancient history once again.

---

*"EAP State Report 1972-1973 Educational Assessment Program," New Jersey Department of Education, Division of Research, Planning, and Education/Field Services.

**See p. 142.

Furthermore, today many pupils have poor study habits without realizing this is the case; this includes many good students in "good" public and private schools in affluent suburbia. Many students have little appreciation of the value of meticulous work, and little idea that drill and the repeated use of a concept in homework can lead to becoming skillful enough to be "creative" in a discipline. Nor is there convincing evidence that these failings originate in the home. On the contrary, parents normally stress these values. Children often seem to learn the lack of appreciation in the schools. As suggested earlier, teachers are often in league with pupils against parents in the on-going battle over the need for homework; parents tend to think the lack of homework contributes to their children's low achievement.*

A peripheral but very important problem seems to exist today which was relatively unknown prior to the mid-1960s. Textbooks used to be of such high quality and syllabuses so logical that the demands on teachers (and parents) in helping youngsters to learn were much less than today. It is difficult to understand how many current texts, written and organized as they are, can aid the normal, logical learning/teaching processes for both student and teacher. Of course, such texts greatly add to the burden of the parents, who must teach their children what the schools fail to impart.

Generally speaking, the evidence on academic achievement seems to indicate that children, in the first through third or fourth grades, bring with them, apparently from the home, attitudes, background and adult support which are conducive to the learning process. They seem to treat school as a new and different world; they tend to listen, behave and learn in this atmosphere. Seen in this light, such recent innovations as the attempt to make learning "relevant" to neighborhood experiences and interests of children may be counterproductive. In my view, schools, as of old, should probably be striving for a higher ideal, one to set them apart from the neighborhoods which produce many of our underprivileged pupils. In any event, the result seems to be that, after the fourth grade, schools tend to come down to the level of untrained children.

---

*See p. 144.

Perhaps due to the erosion of traditional values and the lack of disciplined training, some children tend to leave school prepared for a world which does not exist: certain things in life simply cannot be avoided or blamed on someone else; actions have personal consequences; outside the school environment one has to produce to be promoted; work must satisfy the demands of the economy to be profitable for the worker, many trades and professions require work which gives no credit for good intentions or being nearly accurate -- work must be explicit, meticulous and correct every time; it is important to be well informed and logical, not just spontaneous and talkative; and not everything is relative: young people's ideas, too, can often be simply plain incorrect and even worthless.

An unrealistic approach in schools is reflected in educators' frequent preoccupation with quite subjective issues such as "interpersonal relations," and even music and art education, when coupled with their ambiguity as to whether "arithmetical and punctuation skills...may or may not reflect the needs of given communities."* Today, though skills in art and music can be personally rewarding in a psychic way, few Americans regard them as essential to their daily well-being as reading, writing and arithmetic, which also happen to be difficult subjects to teach. Furthermore, there is no evidence that pupils who have had the attention of full-time, specialized art and music teachers from kindergarten on are obviously superior in these specialized fields to pupils who have not had such training until high school.

---

*See p. 239.

F. The Effects on the Children of the Less Affluent and Others

Despite many "assistance programs" in recent years for the children of the underprivileged, they, in common with all children, continue to pay a high price because of our deteriorating school systems. It might be said that, as mentioned earlier, even though the ninetieth and fiftieth percentile pupils declined in academic achievement, the fact that the lower tenth percentile pupils improved somewhat according to ITBS scores between 1964 and 1971 shows the success of our recent school program among the poor. This phenomenon may be related to Title I efforts, but by no means are all underprivileged children inherently tenth percentile types. Indeed, it is probably the inherently non-tenth percentile underprivileged children who traditionally have used our public school system to the greatest advantage to equip themselves for socioeconomic upward mobility. In my view, if billions of federal, state and local taxpayers' dollars have produced a program which slightly improves achievement of the least gifted at the expense of more talented youngsters, the entire operation must be labeled a failure for the poor as well as all students. Gap closing in education should never be accomplished by bringing the upper groups down; if the whole system declines, those at the bottom suffer as much or more than others.

> ...Democratic education differs from aristocratic education only in the number of persons with whom it deals, not in the values it seeks to impart. To convert the education of the common man into something other than systematic intellectual training is to rob him of his birthright; it is to vulgarize culture under the guise of democratizing it.*

Of most importance for the tenth percentile, however, is the fact that from 1956 to 1964, when the whole system was improving, ITBS data show that the ninetieth percentile group improved by 3.0 months, the fiftieth percentile by 2.3 and the tenth percentile by 1.1 months. From 1964 to 1971, when the ninetieth percentile group declined by 0.3 months and the fiftieth percentile by 0.2 months, the tenth percentile group gained, but only by 0.2 months.

Furthermore, although the old school system was geared to firm middle-class values, under which the better-off native-born descendants of the original and earlier immigrants excelled in academic achievement, it also proved to be an engine which in two generations helped catapult the deprived, largely despised, exploited victims of discrimination, the later immigrants, right past the earlier immigrant groups to the very top of the socioeconomic and educational ladder.**

Because our filter system tends to make it more likely that a talented person will rise in society,*** the children of the poor often have parents who cannot help them as much as more affluent parents can help their offspring. When the whole system slides, the improvement rate of underprivileged children suffers too. Furthermore, as middle class children do not rise to normal achievement levels, they may tend to take jobs to which the underprivileged normally would aspire and often fill. Although we cannot measure the impact of this phenomenon, many quite literate upper middle class school dropouts are filling such jobs. While it is true they often fill them in a desultory fashion, the percentage of such employment may be sufficient to block some underprivileged persons from finding jobs. A lack of skilled people in the upper brackets, may, of course, also tend to deccelerate expanding economic and intellectual activity, which can only hurt those on the bottom. Recent efforts to pass low achievers along in both jobs and college, as though they were high achievers, cannot in the long run make up for what children of adequate intelligence miss in primary and secondary school.

---

*Cremin, The Transformation of the School, pp. 344-345.

**See pp. 118, 119, 185, 186.

***See pp. 131 and 201.

G. A "How To" Book for School Boards

Despite all these problems, the attempt to upgrade our schools must be made once again. Since they are normally the pupils' and taxpayers' legal spokesmen, independent school boards must carry much of the load. One way to assist the school boards in this vital task would be to provide a handbook which would guide the evaluation of the districts' educational functions. The handbook, which must come from some prestigious organization like the Federal Government, could explain such matters as academic achievement and IQ tests, scoring methods, different types of tests, frequency of test administration, and so forth. It could also summarize the available data on effectiveness or ineffectiveness (as measured by student achievement) of many of the proposed inputs to school systems, for instance, audio visual aids, facility expansion (new learning resource centers, new buildings), lower pupil-teacher ratio, more elective courses, specialized teachers, open classrooms, modular scheduling, team teaching, classrooms without walls.

Initially, this information is apt to be somewhat negative because most recent, obvious innovations generally have not been proven to influence academic achievement, but this in itself is important information for policy makers. Later versions of the handbook could reflect studies carried out by the Federal Government which might show positive correlations between academic achievement and inputs to the school system: for example, statistical data on achievement comparing similar student bodies, some which had significant amounts of teacher-graded, daily homework and others which had very little; some with much class-time blackboard work, others with little; some with frequent, teacher-graded quizzes and others with few; some with more emphasis on rote learning, others with less; some with structured, traditional curriculum, others with more free-wheeling, innovative curriculum; etc. Academic (and perhaps artistic) creativity and even student satisfaction might also be tested.

H. "Quick Fix" Possibilities

Even before such studies are completed, however (some could take a few years), the very fact that school boards and the Federal Government were considering output--academic achievement--as the litmus paper for school quality could cause "new" avenues of approach to open. For example, school standards, particularly in junior and senior high schools, might be raised again, and individual students might again be pressed to achieve up to their competence level. More time might be spent on academically rich subjects. Since an orderly classroom is required to accomplish these goals, more emphasis may be placed on discipline. Finally undesirable language and habits might be curtailed, to improve both discipline and verbal skills. To provide time for greater emphasis on academically rich subjects, some of the low-academic content electives should probably be dropped. This would also save tax dollars.

All the preceding changes, in my judgment, seem advisable and should produce more competent students. Nonetheless, without increased knowledge on the part of many teachers, children in upper grades may still not attain their maximum achievement level. On the other hand, much can be done in the lower grades, where demands on teachers for factual knowledge are far less stringent and "administrative" fixes can probably be effective. For example, if non-handicapped children who experienced reading and math difficulties, etc., in the lower and mid-primary grades were helped by the classroom teacher after school, sent to summer school or, as a last resort, were to be kept back a year or two in the primary grades, many reading and math problems in the upper primary grades and high school might be drastically reduced. We know how to teach almost all non-handicapped children to read. We have been doing it for almost one hundred years, for children of all types, large numbers of whom could not speak English when they entered school. We have had great success in this area in the recent past, right up to the mid-1960s. Even our core city and lower tenth percentile pupils appear to have done better nationally then than today. The method used to teach children to read in those days is no secret; we can go back to it in a pinch. This method requires teacher concentration.

Though one may argue about whether the phonic method or sight reading should be used, it seems obvious that much time must be spent by the teacher and much drill carried out. Thus, much reading must be done during and after normal class hours, in and out of school. This applies particularly to children beyond the third or fourth grade. They probably should not go past the fourth grade until they can read reading textbooks for that grade. Beyond this grade (or even beginning with it) we should be improving, honing, and expanding a skill, not teaching its fundamentals.

If the material is not too difficult, most children apparently suddenly find themselves reading, as though a light had gone on. Promoting a child to more difficult material when that light has just begun to barely flicker may be counterproductive. If he has not mastered the basics first, he can become frustrated and discouraged by the continually increasing difficulty of assignments as he is passed through the grades. It is among such students that we usually find the most dropouts and the hardest to "motivate." On the other hand, once a pupil can really read well, he is probably more likely to "take off" in academic achievement to the limit of his competence in later grades.

Many math and other primary school problems might be reduced by a reemphasis of rote learning. For example, we know how to teach children the multiplication tables, and we know that this knowledge makes long division much easier. Children can and do learn the "times tables" by rote, chanting in unison if necessary.

We also know how to teach children the fundamentals of grammar and how to improve their verbal skills. Parsing and diagramming sentences, essay writing (and correction by teachers) and the strictly enforced use of proper grammar, grade equivalent vocabulary and good diction at all times in school are essential.

Blackboard work in combination with diligent teacher assistance after school when needed, has traditionally facilitated pupils' progress, even in rather large classes. We also know how to teach history and geography, but this method is dependent upon learning a significant amount of facts, per se, a practice too many educators frown on today. In junior and senior high school, much homework and a good number of quizzes, many essay type, are required. This, of course, means more work for the teachers who must correct these essay tests, but it allows pupils to be creative and demonstrate a knowledge of the subject beyond that possible in multiple choice test responses.

I. A Real Two-Track System

These processes are likely to repel some educators who view rote learning as part of a "repressive " "lock step system." Yet we have no proof that considerable amounts of rote learning, per se, inhibit creativity or otherwise retard children. In my judgment, however, in order not to penalize children of high deductive capabilities, a real "two-track" system of teaching should be introduced in the primary grades--one track emphasizing retentive abilities, the other deductive. Pupils need not be wedded to either track, but should be shifted from the retentive to the deductive, or even vice versa. In fact, if absolutely necessary, pupils could be shifted back and forth between the two "tracks" more than once in their first few years of school, as they require help. Shifting between "tracks," of course, would be significant only inasmuch as a greater concentration by pupils on one type of study than another would occur in certain subjects. All pupils would have to meet standard competence levels in either track for each subject in order to advance.

This two-track system should do much to allow more pupils to excel in some subject(s) and thus acquire an autocatalytic incentive to learn--normally lower achieving children actually, and obviously, succeed in learning something. This process, however, unlike several of the other processes mentioned above, requires great concentration and diligence on the teacher's part, even though it requires little if any additional factual knowledge.

J. The Question of Violence in the Schools

One feels reluctant to talk about correcting such an obvious problem as violence in our schools. It should take very little Federal or state leverage, for example, to convince school districts to solve the more dangerous disciplinary problems. It is sad that the welfare and safety of our children (and even the teachers) should be an issue inside our schools, but to the extent that they are, all levels of government must bring pressure to remedy this situation. We know how to do that too; hoodlums are to be expelled and educated in reform schools, not allowed to dominate our public schools. This minority of chronic troublemakers must be separated from the normal pupil population. This is a clear-cut police and court problem, and perhaps the Federal Law Enforcement Assistance Agency and similar state agencies should work with the local police and schools on its resolution. (Since the plea of most big city juvenile agencies is lack of space, perhaps Federal and state money could be spent to build--or convert buildings to--modern reform schools, where "hard cases" could be segregated from potential hard cases, etc.) In any event on this issue, though they may disagree on technique, all educators and the public are in accord--violence must be eliminated from our schools.

K. The Curriculum

On the following issue we find much less accord; considerable changes will probably be necessary in our current curriculum, particularly if we must reinstitute teaching methods which have been successful in the past. In order to spend the time required to really teach the essentials to children in the limited hours of a school day, the number of courses may have to be reduced to what they once were. Many "specialized" courses in elementary schools are of little proven value and take up a significant part of school hours. Even the apparent current emphasis and time spent on science in elementary schools can be questioned as to value to the pupil's knowledge of science.* Such courses cut down on the time available for math and grammar (to say nothing of geography--an often largely abandoned basic subject, the ignorance of which is often a bit shocking among current primary and secondary school pupils). General science, biology, chemistry, etc., are fine in high school, if the time has been spent which is necessary to prepare a pupil well in mathematics (the underpinning of sciences) in elementary school. If he is truly skilled in basic math--ratios, etc.--when he enters high school, he can progress and be "creative" in science later. The same could be said of some of the other "new" classes which take up the limited time in an elementary school day.

---

*There is little evidence of achievement levels in specialized courses in grade schools; tests are normally not administered (or at least results are not recorded). In Delaware, science achievement dropped in both the fourth and eighth grades between the 1971-72 and 1972-73 school years. In Hawaii science achievement in both the fifth and seventh grades plummeted between 1965 and 1973. (See the Appendix by Paul J. Bracken, pp. 8-10 and 16-17). A one million dollar survey in the 1972-73 school year, however, compared 90,000 nine-, thirteen- and seventeen-year-old pupils' knowledge of science with that of a similar group of children in the 1969-70 school year. The survey showed that "the average decline in science achievement at all three ages between 1969-70 and 1972-73 was about two percentage points. This appears to correspond to the loss of half a year of learning experience." The Journal-News, Rockland County, New York, March 27, 1975, Gannet News Service, dateline Washington.

In high school the curriculum must be adjusted. One feels compelled to say that pupils simply must know the history of our civilization and great literature of our language. They must be exposed to some higher mathematics, some real science and to one of the major foreign languages. They simply must be able to transform ideas into a moderate amount of textual material and in a way which is comprehensible and grammatically correct (to say nothing about transforming somewhat complex ideas and nuances into articulate, grammatically correct, accurate, comprehensible speech).

Syllabuses and courses used in some states today may simply be inadequate tools to impart the knowledge many children currently lack, which they used to acquire under the old system. Just as the "new math" courses and syllabuses are beginning to be dropped in primary schools in favor of traditional ways of teaching mathematics,* the same action may be required in the social studies area in high school. "Asian and African Culture Studies" is huge in scope from the viewpoint of centuries of time, and geographic, historic and cultural diversity, but has little depth and is simply no substitute for Ancient History in ninth grade. Such modern writings as Soul on Ice simply do not impart the important elements which substantial amounts of classical American and English Literature do (to say nothing of the civilizing process which we wish to see advanced in our high schools). Nor are "rap sessions" about a current movie a class has viewed any substitute for teacher-scrutinized and corrected written book reports or themes.

---

*See p. 142.

The reemphasis on scholastically richer courses and the reduction of these many "enrichment" and "mini courses"* should, of course, not only tend to improve academic achievement, but also save the taxpayers great amounts of money by trimming the huge teaching and administrative staffs. Many expensive facilities and much equipment may also prove to be unnecessary, though their costs are far less than costs of salaries.

L. Facing the Problem

These are often thought to be "old-fashioned" teaching methods, as perhaps is the idea that the classroom must essentially have an orderly, well-structured (but by no means unhappy) environment. Many "progressive" educators may object to these methods, but until other proven techniques are developed these are the only tried and true teaching methods we have and, at least in the lower grades, practically all current teaching staffs generally have the knowledge necessary to implement them. It is true that in many ways this is returning to a system which we had about twenty years and a half a trillion tax dollars ago. This is certainly a bitter pill to swallow, but with the welfare of a generation of youngsters at stake, if our current teaching staff can indeed meet the demands, we may have no other choice. Furthermore, no evidence suggests that most of the old system was especially bad, and there is also no evidence that a normal, calmer environment in the schools precludes some real improvements wrought within the schools' traditional charter, which will probably be evolutionary, well thought out and tested. Finally, but of vast importance, under such circumstances the morale of the many dedicated, truly good teachers still in the schools should improve, their value should be recognized and their influence should increase--events which in themselves should greatly improve the schools' scholastic stature. As we have seen, we apparently have previously experienced dips in academic achievement levels and the system has usually recovered, it seems, largely through a reemphasis of the fundamentals.

---

*See pp. 147-149.

Eventually, as the Federal Government becomes more secure in its knowledge of what factors are likely to be effective in raising academic achievement, or at least what factors are very likely not to be effective, the Federal grants of money might provide significant leverage to influence policies with a view toward lessening (or even reversing) the downward trend in our children's academic achievement.*

---

*I was surprised to hear a Federal education expert say that he approved of the approach of parents attempting to accomplish this through litigation, parents suing school districts to force the schools to teach their children to read.

Of course state departments of education have even greater leverage and incentive to persuade local districts to improve academic achievement. The constantly proposed solution of just "throwing money at the problem," however, probably must be rejected; in fact, an analytical approach to educational recommendations may result in the conclusion that this approach should have been rejected years ago. This is not to say that money should not be spent, but that under dispassionate, logical analysis it is more likely to be spent carefully, on efforts with known goals within the standard charter of educational systems and on proven methods to reach them.

One place, for example, where Federal and state money should probably be used as a lever to set things aright is in the teachers' college. We will need some teachers well grounded in academic subjects. Many of the teachers who can meet the requirements of teaching children as they used to be taught are among the older teachers and will retire first. As indicated earlier, finding teachers with qualifications necessary to replace them may be difficult without some improvement in teachers' colleges.* Even today, with a drop in enrollment in primary schools and a glut of would-be and laid-off teachers on the job market, jobs go begging for teachers competent in truly academic subjects. Teachers who can really teach math, even to junior high school children, are hard to find. Classroom teachers who can and also really want to teach children to read, to learn grammar and English composition, are also not easy to find.

---

*It is interesting to note that some school districts, in order to maintain (or perhaps even further reduce) their present pupil-teacher ratio in a period of tight money, encourage the early retirement of these older, more highly paid teachers in order to replace them with younger, less highly paid instructors.

Something may also be done about the training of supervisory personnel. Colleges teaching graduate courses in school administration apparently often make little impression on school superintendents as far as implementing the teaching of academic subjects is concerned. Many superintendents seem to be less involved in this function than they should be, and others, though deeply concerned, are for many reasons evidently often relatively ineffective when they do become involved.* Strong superintendents, dedicated to academic achievement and well trained in ways to supervise and assure the development of this achievement in a district's children, could help much in the reversal of the current downward trend in education. Finding such men may be more difficult than might be imagined, for district superintendents and heads of state departments of education (often, by law, former teachers) too often have become enamored of the easier, "gimmicky" way of "solving" academic achievement problems--audio-visual aids, learning resource centers, new buildings, low student-teacher ratios, open classrooms, etc.

These leverage efforts linked with the effort to equip school boards, parents and the public with the information they need to ride herd on superintendents and teachers, to assure the adequate education of our children, may be the most important functions of the Federal Government and state departments of education. Ultimately, however, it is the local school districts who must do the job. School boards must study the information, cut through the educators' jargon--become minor experts, able to look out for the welfare of the children and taxpayers in the milieu of activist pressure of all types, bargaining sessions with administrators and teachers' unions, etc. If we can once again restore the notion that children's academic achievement is the paramount concern for schools, the welfare of the taxpayers local, state and Federal (or parents who pay private schools) second, and other interested parties third, we may be able to reverse this downward trend in education before damage is done to too many more of our children.

---

*The author knows of one Connecticut superintendent, aware of the present poor record of verbal skills among pupils, who determined some time ago that high school students should write a theme a week. To date this has not occurred. English teachers who teach five classes a day insist their schedule be cut to four classes a day if they carry out the theme-a-week plan.

APPENDIX

by Paul J. Bracken

ARIZONA

Arizona has a limited testing program that examines reading and listening for grade 3 pupils.* The tests were administered to all students in October 1973. The instrument used was the 1973 Stanford Reading Achievement Test Form A, Primary Level II; about 35,000 pupils took this test. Results for reading show that Arizona Grade 3 students scored slightly higher than the national average.

Subtests	Items/Max. Possible	Mean Raw Score		Grade Equiv. of Mean Raw Score	
		Nat'l.	Ariz.	Nat'l.	Ariz.
Dictated Vocabulary	37	25.3	24.5	3.0	3.0
Word Reading	45	33.9	34.0	2.8	2.8
Paragraph Reading	48	32.0	31.5	2.8	2.8
Word Study Skills	65	46.1	47.0	2.8	2.8
Listening Comprehension (Total Tests)	50	34.6	34.7	3.0	3.0
Total Reading	158	112.1	112.7	2.8	2.8
Total Auditory	87	60.0	59.3	2.9	2.8

It will soon become apparent that this is not very surprising in that, as we shall see, many other lower grades in other states seemed to have been performing better over the past few years. Information on the effect of class size is available with reference to Arizona reading tests.

---

*Data in this section from "Analysis of Standardized Testing Results 1973-1974," State Department of Education, Phoenix, Arizona, April 1974.

Pupils in Class	Number	Percent	Mean Raw Reading Score	G.E. Raw Reading Score
1- 4	56	0.16	111.57	2.8
5- 9	297	0.85	107.54	2.7
10-14	758	2.16	107.52	2.7
15-19	2014	5.74	107.19	2.6
20-24	10574	30.16	110.45	2.7
25-29	13224	37.71	113.82	2.9
30-34	6321	18.03	115.83	2.9
35-39	835	2.38	118.17	3.0
40-45	163	0.46	122.82	3.2
45 +	821	2.34	114.07	2.9

This merely confirms what almost all serious studies of this issue have found. Class size, per se, has little to do with learning.

CALIFORNIA

California has been administering statewide achievement tests for the past several years to grades 1, 2, 3, 6, and 12. All public school students in the state participate in the program. Tests of fundamental skills such as reading, arithmetic, etc., are used.* Along with achievement scores, a wealth of other information on pupil characteristics, average class sizes, median teacher salaries, etc., is collected and analyzed. The trend in test scores is as follows:

Grade 3 Reading Achievement

	50th California Percentile in Terms of Nation		Number of Pupils Tested
1966-67	34	Stanford Reading Test	313,380
1967-68	34		319,903
1968-69	36		329,447
1969-70	36		347,410
1970-71	38		336,845
1971-72	52	Cooperative Primary Reading Test	334,644
1972-73	52		329,187

Grade 6 Scholastic Aptitude and Achievement

The grade 6 testing program had consisted of the Lorge-Thorndike Intelligence Test for verbal ability and the Comprehensive Tests of Basic Skills (Form Q, Level 2) for other skill measurements.

---

*For the data source and more complete information on the program see California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1974.

Grade 6

Statewide 50th Percentile in Terms of Publisher's Percentile Rank

	Verbal Ability	Reading	Language	Spelling	Arithmetic
1969-70	48	48	43	49	47
1970-71	46	46	43	49	43
1971-72	46	44	39	42	38
1972-73	43	44	39	42	38

There were more than 300,000 pupils taking each test for each year.

Grade 12 Scholastic Aptitude and Achievement

Grade 12 has been taking the Lorge-Thorndike IQ Test and the Iowa Tests of Educational Development (Form X-4). Statewide raw scores are presented in parentheses beside the publishers percentile rank of the California median score.

Grade 12

	Verbal Ability	Reading	Expression	Spelling	Quantitative
1969-70	47 (101.5)	52 (21.5)	42 (40.8)	47 (8.2)	48 (13.2)
1970-71	45 (101.0)	49 (21.2)	40 (39.9)	47 (8.1)	48 (12.9)
1971-72	39 (99.1)	49 (20.8)	38 (38.6)	47 (7.8)	48 (12.8)
1972-73	39 (98.8)	47 (20.2)	36 (37.5)	47 (7.7)	48 (12.6)

For each test there were more than 200,000 pupils participating.

We see again the pattern of rising achievement in the lower grades (1, 2, and 3) and falling achievement in grades 6 and 12. A particularly interesting feature of these data is the drop in IQ score for grades 6 and 12 statewide. The drop is more pronounced for grade 12 than for grade 6. Unfortunately no data on IQ trends are presented for the lower grades.

In the upper grades all test scores have consistently fallen over time. The most precipitous drop is in grade 6 Arithmetic and in grade 12 Verbal Ability. Grade 12 Expression has also fallen quite a bit, as has grade 6 Spelling.

While the decline in verbal IQ scores may be speculated to be causing other drops in achievement, it is hard to reconcile this with the rising achievements in grades 1, 2, and 3. The rising achievement of pupils in the lower grades contrasts sharply with the drops in IQ and achievement since the same people are taking the test a few years apart. Furthermore, since this achievement drop in the upper grades is, as we shall see, apparently a national phenomenon, it is hard to use the argument that California is uniquely plagued with an influx of lower achieving upper graders.

For this data set, as with those of so many other state school systems, one is struck by the consistent declines for all scores year after year. Although grade 12 Quantitative declines only slightly, one would expect there to be at least one random point that is higher than the preceding year's point. Such is not the case. This trend shows up in many other achievement time series, including SAT scores. It is difficult not to conclude that declines in Reading, Expression, and Spelling among all California grade 12 students have some influence on national SAT trends in verbal ability. Furthermore, as the following breakdowns show, in grade 12 the 75th percentile raw achievement scores (which are most likely to include the highest number of college-bound students) decline faster than those of the 25th percentile. Grade 6 does not show the same trend.

A final striking feature of the California data is the fact that grades 6 and 12 are both below the publisher's national average in all areas and have been since the data begin in 1969-70.

CALIFORNIA STATE TESTING PROGRAM RESULTS

GRADE 6

	Intelligence Test				Reading				Language				Spelling				Arithmetic			
	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973
75TH PERCENTILE																				
State Raw Score	109.0	108.2	107.5	107.0	71.8	71.4	70.5	70.6	68.4	67.9	66.5	66.7	25.7	25.7	25.5	25.4	84.8	83.2	81.5	81.6
Publisher's Percentile Rank	74	72	72	70	74	72	72	72	68	68	65	65	73	73	73	64	74	68	65	65
25TH PERCENTILE																				
State Raw Score	87.9	87.4	87.0	86.9	45.7	45.3	43.7	44.3	44.3	43.2	41.0	41.2	17.6	17.3	16.4	16.3	58.9	56.1	52.9	53.6
Publisher's Percentile Rank	25	23	23	23	24	23	21	21	21	19	17	17	22	19	16	16	24	21	18	19

GRADE 12

	Intelligence Test				Reading				Expression				Spelling				Quantitative			
	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973	1969-1970	1970-1971	1971-1972	1972-1973
75TH PERCENTILE																				
State Raw Score	113.2	112.8	110.5	110.1	29.8	29.4	28.8	28.1	50.8	49.8	48.4	47.3	11.1	11.0	10.7	10.5	19.0	18.7	18.4	18.3
Publisher's Percentile Rank	74	74	70	67	74	71	71	67	68	65	60	57	72	72	72	72	77	77	74	74
25TH PERCENTILE																				
State Raw Score	90.5	90.2	88.7	88.3	15.4	15.1	14.9	14.6	30.3	29.6	28.6	27.7	5.4	5.3	5.2	5.0	8.8	8.6	8.5	8.4
Publisher's Percentile Rank	22	20	18	16	24	24	24	24	22	22	21	19	26	26	26	26	25	25	25	20

California State Testing Program 1971-72 & 1972-73, California State Department of Education, Office of Program Evaluation and Research, 1974, pp. 19-20

DELAWARE

The Delaware Educational Assessment Program contains a testing program administered to pupils in grades 1, 4, and 8. Testing is in the spring and data are available only for the 1971-72 and 1972-73 school years.

The Cooperative Primary Test is given to grade 1 and the Sequential Tests of Educational Progress are given to grade 4. Grade 8 takes School and College Ability Tests. The results* are expressed by a standardized T score and also in terms of the mean number of correct responses for Delaware and the national norm.

DIFFERENCE BETWEEN DELAWARE AND THE NATION IN MEAN PERCENT CORRECT RESPONSES

	1971-72			1972-73		
	Total No. Items	No. Items Used for Comparison	Difference	Total No. Items	No. Items Used for Comparison	Difference
			GRADE 1			
Reading	50	50	.2%	50	46	1.6%
Mathematics	55	55	- .9	55	42	2.7
			GRADE 4			
Total Ability	100	100	-4.8%	100	100	-5.2%
Reading	60	44	-3.9	60	28	-3.6
English	100	90	-5.4	100	86	-5.3
Mathematics	75	58	-5.8	75	54	-3.9
Science	50	50	-3.8	50	26	-4.2
			GRADE 8			
Total Ability	100	100	-3.5%	100	100	-3.4%
Reading	60	58	-7.0	60	49	-6.6
English	100	98	-7.7	100	98	-6.9
Mathematics	75	70	-7.6	75	63	-6.5
Science	50	50	-4.6	50	41	-7.2

---

*Preliminary Report of the Spring 1973 Testing Program, Delaware Educational Assessment Program 1972-73, Delaware Department of Public Instruction, September 1973.

These data can be interpreted as the differences between the mean percent correct responses of Delaware pupils compared to national norms. For example, in grade 1 Reading, Delaware pupils in 1972-73 scored 1.6 percent more correct answers than students nationally. The number of items corresponds to the total number of questions for the particular test under consideration. Some questions were eliminated from statistical consideration because there were no corresponding national figures for comparison, as reflected in the number of items used. Note the substantial decrease in sample questions for 1972-73 over 1971-72. Although not mentioned in the Delaware assessment report, this would seem to make 1972-73 achievement level estimates less reliable than 1971-72 estimates.

For the most part, grade 1 scores are above national norms. As with other states, Delaware exhibits the usual pattern for the higher grades, i.e., achievement is significantly below national achievement levels. Also note that achievement falls more for grade 8 than for grade 4. This is another familiar feature of recent achievement test data.

There does appear to be an increase in achievement for grades 4 and 8 in 1972-73 over 1971-72. In fact, the official state assessment report asserts that for grade 8, "A closer inspection of the [data] indicates, however, that the comparisons improved slightly, in Delaware's favor, from 1971-72 to 1972-73 on the English and Mathematics tests."*

It is not entirely clear, however, that for the Mathematics test in grade 8 ample statistical consideration was given to the fact that more questions were screened from the comparison in 1972-73 than in 1971-72 (63 used out of 75 compared to 70 out of 75 respectively).

---

*Preliminary Report of the Spring 1973 Testing Program, p. 14.

In conclusion, data from Delaware show that grade 1 is above the national norm and grades 4 and 8 are significantly below it. Also the upper grades are about two to three times more below the national norm than grade 1 is above it. Grade 4 English and grade 8 Science are the poorest subjects. Grade 8 Science is particularly interesting in that much of the new curriculum in mathematics was designed to further enhance scientific learning.

The ability level in Delaware is also below the national norm. This can certainly explain some of the achievement levels but an interesting issue would be the variability of IQ over time.

DISTRICT OF COLUMBIA

The District of Columbia has a citywide testing program for public school pupils in grades 1 through 9. The Metropolitan Achievement Tests (1970 Edition) are administered to grades 1 and 2 and the Comprehensive Tests of Basic Skills (1968 Edition) are given to grades 3 through 9. Tests were taken by all pupils in regular instructional programs, except that in May 1973, a 10 percent stratified sample was tested in grades 4 through 9.

An interesting feature of the D.C. data is that tests are given early and late in the year for the same grade. This permits an estimate for achievement gains for a grade in a given school year.

Scores* for Reading and Mathematics for grades 1 through 9 appear below.

PERCENTILE STANDING OF MEDIAN SCORES
IN TERMS OF NATIONAL NORMS

	Reading				
	Fall 1970	Spring 1971	Fall 1971	Fall 1972	Spring 1973
National	50th	50th	50th	50th	50th
California Achievement Tests, Level 1					
Grade 1	*	45	*	*	43
Grade 2	15	39	24	28	38
Comprehensive Tests of Basic Skills, Levels 1-4					
Grade 3	15	28	20	23	27
Grade 4	17	29	21	*	22
Grade 5	19	28	21	*	22
Grade 6	23	30	23	*	22
Grade 7	19	19	12	*	17
Grade 8	17	24	14	*	20
Grade 9	19	24	18	*	17

*Test not administered.

---

*A Summary of Reading and Mathematics Test Results as Measured by Norm-Referenced Tests, 1970-73, District of Columbia Public Schools, July 1973.

	Mathematics				
	1970	Spring 1971	Fall 1971	Fall 1972	Spring 1973
National	50th	50th	50th	50th	50th
California Achievement Tests, Level 1					
Grade 1	*	41	*	*	36
Grade 2	10	39	20	20	38
Comprehensive Tests of Basic Skills, Levels 1-4					
Grade 3	9	29	16	25	30
Grade 4	14	26	9	*	23**
Grade 5	15	29	16	*	25**
Grade 6	20	29	23	*	21**
Grade 7	11	17	10	*	16**
Grade 8	14	21	11	*	19
Grade 9	14	18	15	*	14**

*Test not administered.

**Sample population for grade.

Here again we see the general tendency for the lower grades not only to be achieving more but to be steadily improving over time. Grade 3 Reading advanced from the 20th (fall 1971) to the 23rd percentile (fall 1972). This trend does not hold out for the upper grades, where achievement is lower and also downhill. According to data for grade 9 Reading, there is even the chance that achievement declined during the school year; students at the 15th percentile in the fall of 1971 were tested at the 14th percentile in spring 1973. Unfortunately, no tests were administered in fall 1972 that would provide evidence to substantiate this interesting possibility.

Achievement in Mathematics is generally lower than Reading for the upper grades. A phenomenon present here is the tendency for scores to hit a certain rock bottom and than increase slightly. Although there are some scores at the 10th and 11th percentiles, there is a general barrier at the 14th. This also seems to be true for scores in other large cities. Perhaps at this achievement level, certain random tendencies dominate year-to-year fluctuations. The literature has some citations on this phenomenon. The issue seems to be whether "below chance" scores are useful as measures of achievement. It is possible that very low scores may be in part due to lucky or unlucky guessing or to massive omission.* To some extent this may be happening in testing programs of America's large inner cities. A detailed study of this possibility is beyond the scope of this report. However, test results for Washington and Philadelphia lead one to consider the hypothesis, since it does explain some of the trends.

---

*For further discussion, see Angoff, ed., The College Board Admissions Testing Program, p. 172.

GEORGIA

Georgia has a statewide assessment program that also administers standardized tests. Grades 4, 8, and 11 were tested in 1972. In 1971 grade 12 was tested instead of grade 11.

The reporting of test scores in Georgia is a very complicated procedure.* Only test score comparisons within a defined category are possible. A category consists of schools which have similar characteristics: Average Daily Attendance (ADA), Cognitive Ability Test Scores, percentage of students in ADA in a school above a minimal income level.

> While comparisons cannot be made across categories, it should be possible to compare schools or systems within a given category. For example, since the systems in Category 1 are all large systems with students who are high in academic abilities and family income, it is reasonable to expect their achievement test scores to also be similar....**

However, it was possible to obtain some meaningful statewide data over time and these are presented on the following page.

Of eight possible comparisons with these data, eight have declined. Given this statewide achievement decline, it would be difficult to argue that education in Georgia is improving over time.

---

*See "8th Grade Schools Category Report," Office of Instructional Services, Georgia Department of Education, January 1974.

***Ibid*., p. 1.

GRADE 8
(RAW SCORES)

	1971	1972	1973
Vocabulary		92.5	91.1
Reading		94.1	92.5
Language		91.8	90.7
Work-Study		94.2	93.0
Mathematics		95.2	92.7
Verbal Ability	92.4	91.9	
Nonverbal Ability	91.9	92.9	

GRADE 11
(STANDARDIZED T.A.P. SCORES)

Composition	--	46.9	45.3
Reading	--	47.0	45.9
Mathematics	--	46.8	45.2

HAWAII

Hawaii has a statewide compulsory testing program for students in grades 4 through 11. The Sequential Tests of Educational Progress (STEP) and the School and College Ability Tests (SCAT) are administered.* The trend speaks for itself.

STEP, TABULATIONS OF HAWAII AVERAGES, FALL 1965-1973
(IN MID-PERCENTILES)

Grade	Publisher's Average	1965	1966	1967	1968	1969	1970	1971	1972	1973	
					Reading						
4	(50)	50	46	50	50	50	46	46	46	46	
6	(51)	58	54	58	58	58	54	51	46	46	
8	(50)	54	54	54	54	54	50	45	45	42	
10	(49)	43	43	49	43	43	43	39	39	35	
					Mathematics						
4	(51)	62	51	62	51	62	51	51	51	51	
6	(48)	48	48	48	42	42	42	36	36	36	
8	(50)	56	50	56	50	50	43	43	43	38	
10	(43)	43	43	43	43	43	39	39	39	35	
					Writing						
4	(52)	52	45	52	45	45	45	45	39	39	
6	(48)	48	44	44	44	44	40	36	36	33	
8	(51)	56	56	56	51	51	47	47	44	44	
10	(49)	53	53	58	53	53	49	49	43	43	
					Science					Spring/Fall	
5	(48)	48	54	48	48	48	48	43	43	38	32
7	(50)	50	57	57	50	50	50	41	42	36	31
9	(52)	N/A	N/A	60	60	52	60	52	43	43	36
11	(46)	N/A	39	39	33	33	33	33	33	33	28
					Social Studies						
5	(53)	53	53	46	46	46	39	39	34	34	34
7	(50)	56	56	56	56	50	50	50	43	43	38
9	(52)	N/A	N/A	52	52	37	45	45	37	37	31
11	(49)	N/A	49	49	43	49	49	43	43	39	39

---

*Data from "Summary Report of Statewide Testing Program 1972-73," Report No. 83, Office of Instructional Services, Evaluation Section, Department of Education, State of Hawaii, October 1973, p. 19.

SCAT, TABULATIONS OF HAWAII AVERAGES, FALL 1965 TO 1973
(IN MID-PERCENTILES)

Grade	Publisher's Average	1965	1966	1967	1968	1969	1970	1971	1972	1973
					Quantitative					
4	(51)	62	62	62	62	62	62	62	62	62
6	(47)	55	55	55	55	55	47	47	39	N/A
7	(51)	-	-	-	-	-	-	-	-	51
8	(52)	52	52	52	46	46	41	41	41	N/A
10	(49)	58	58	54	54	49	44	44	40	40
					Verbal					
4	(55)	55	55	55	55	55	55	46	46	46
6	(56)	56	56	61	56	56	56	51	51	N/A
7	(48)	-	-	-	-	-	-	-	-	48
8	(50)	56	56	56	56	56	50	50	50	N/A
10	(46)	42	38	46	46	42	42	42	38	38

In 1965 Hawaii was at or above the publisher's national average in most areas. From this level the state's achievement has fallen to very low levels. The drop in achievement is present in all skills and for all grades. Seventh grade Science has dropped an amazing 26 percentile points in six years and grade 10 Quantitative has fallen 18 points. On a statewide basis this is truly a massive decline.

An interesting feature of the Hawaii data is the decline in all areas, including Science and Social Studies. If the new curriculum is accompanied by drops in Reading, Mathematics, Writing, Science and Social Studies achievement, then what can one infer about the new curriculum?

IDAHO

Idaho has a voluntary statewide testing program for pupils in grades 9 and 11. Grade 9 students take the Differential Aptitude Tests (DAT) and grade 11 students take the Iowa Tests of Educational Development (ITED). Although school participation is not required, 98 percent of those eligible participated. Approximately 11,000 students were tested in 1972. Data were available for only two years for each grade.

GRADE 9, DAT MEAN STANDARD SCORES

	Fall 1972		Fall 1973	
	Male	Female	Male	Female
Verbal Reasoning	22.9	23.4	22.2	22.8
Numerical Ability	18.7	19.1	18.4	18.9
Abstract Reasoning	31.0	31.5	29.6	30.6
Spelling	59.7	66.4	59.2	66.0
Grammar	22.5	25.8	20.8	23.8

GRADE 11, ITED AVERAGE NATIONAL PERCENTILE RANKINGS

	1971-72	1972-73
Social Studies	40	40
Natural Science	47	43
Corr. of Expression	37	32
Quantitative Think.	49	49
Reading Literature	47	47
Reading Average	51	51
Vocabularly	47	47

---

*"Differential Aptitude Tests, Idaho Percentile Norms," 1972-73 and 1973-74. "Tables of Standard Scores with Corresponding Percentile Norms for Iowa Tests of Educational Development," 1971-72 and 1972-73. State of Idaho, Department of Education.

Although only two years of data were available for each grade, it is striking that out of 17 possible comparisons (10 for grade 9 and 7 for grade 11), 12 are down and none is up. The largest drops appear to be in grade 9 Grammar and grade 11 Expression. Also note that all but Reading in grade 11 are below the national average.

IOWA

Iowa has a statewide testing program for grades 1 through 12. Not surprisingly, the instrument for grades 1 through 8 is the Iowa Tests of Basic Skills. Although participation is not mandatory, about 95 percent of eligible schools were included in a recent administration. During 1972-73, over 293,000 pupils were tested in grades 1 through 9. Data for grades 3 through 8 are shown below.*

IOWA, ITBS COMPARISONS, 1965-1972
(IN TERMS OF 1965 "BASE-YEAR" PERCENTILE RANKS)

GRADE 3

YEAR	VOCABULARY	READING	LANGUAGE SKILLS				WORK-STUDY SKILLS			MATH SKILLS	
			SPELLING	CAPITALIZATION	PUNCTUATION	USAGE	MAPS	GRAPHS	REFERENCES	CONCEPTS	PROBLEMS
1965	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
1966	51.7	50.9	50.8	50.8	50.9	50.5	52.5	51.4	51.2	51.1	52.2
1967	52.4	52.0	50.6	49.7	50.9	51.2	52.5	51.7	52.6	51.8	54.0
1968	52.4	52.0	51.3	50.5	50.9	51.7	54.1	52.5	53.0	51.8	55.0
1969	50.3	50.4	48.0	46.8	47.0	49.1	52.2	51.4	50.4	49.6	50.4
1970	51.0	50.6	48.2	46.8	47.2	48.6	52.9	51.7	51.2	50.4	53.1
1971	51.0	50.9	46.5	46.0	46.0	47.9	52.5	51.0	50.0	49.0	51.8
1972	51.3	51.3	46.5	48.4	50.3	49.1	54.1	52.1	52.1	50.0	54.5

GRADE 4

YEAR	VOCABULARY	READING	LANGUAGE SKILLS				WORK-STUDY SKILLS			MATH SKILLS	
			SPELLING	CAPITALIZATION	PUNCTUATION	USAGE	MAPS	GRAPHS	REFERENCES	CONCEPTS	PROBLEMS
1965	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
1966	49.8	51.2	51.3	50.8	47.8	51.0	52.1	51.9	51.2	51.4	50.6
1967	50.2	51.2	50.7	49.7	49.3	50.7	52.1	51.9	51.2	49.6	48.9
1968	49.1	51.4	49.5	50.3	49.8	50.7	53.4	53.6	51.8	51.4	49.2
1969	48.5	51.4	49.5	49.8	49.6	50.7	53.4	56.0	53.0	50.9	47.8
1970	47.8	49.5	48.1	47.7	47.4	48.6	52.8	55.5	51.8	49.6	46.7
1971	46.8	49.2	48.4	44.9	47.4	49.3	52.5	55.2	51.5	49.0	46.2
1972	48.1	49.6	48.8	45.7	47.4	48.4	54.5	55.2	53.0	50.4	47.0

---

*Iowa Basic Skills Testing Program, The University of Iowa.

GRADE 5

YEAR	VOCABULARY	READING	LANGUAGE SKILLS				WORK-STUDY SKILLS			MATH SKILLS	
			SPELLING	CAPITALIZATION	PUNCTUATION	USAGE	MAPS	GRAPHS	REFERENCES	CONCEPTS	PROBLEMS
1965	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
1966	50.8	50.4	51.1	51.3	52.3	50.6	52.2	51.9	51.1	50.9	49.2
1967	50.3	50.7	51.1	50.0	50.6	50.9	52.2	51.9	51.1	49.8	47.8
1968	49.3	50.2	49.2	48.5	49.8	49.8	52.2	52.1	50.9	48.8	46.6
1969	49.8	49.6	47.5	46.6	48.1	48.9	50.9	52.4	51.1	46.8	43.8
1970	49.6	49.6	47.8	46.4	47.9	47.3	51.5	53.2	51.3	46.4	43.2
1971	49.8	48.4	47.7	45.8	48.1	47.3	50.3	52.7	51.3	44.3	42.9
1972	49.3	48.2	47.7	45.8	47.2	47.0	52.2	54.1	51.3	46.0	43.8

GRADE 6

YEAR	VOCABULARY	READING	LANGUAGE SKILLS				WORK-STUDY SKILLS			MATH SKILLS	
			SPELLING	CAPITALIZATION	PUNCTUATION	USAGE	MAPS	GRAPHS	REFERENCES	CONCEPTS	PROBLEMS
1965	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
1966	50.9	50.0	51.4	51.6	51.0	49.9	50.4	51.0	51.0	50.8	49.1
1967	50.5	49.6	51.0	51.4	50.6	49.3	51.0	50.8	50.8	48.8	47.2
1968	50.2	50.3	51.2	52.3	51.4	49.9	53.2	52.6	52.3	49.2	46.3
1969	50.2	49.3	50.3	49.8	50.2	48.0	52.0	52.3	51.4	46.0	43.0
1970	49.2	48.0	49.0	48.9	49.1	47.0	51.5	51.9	51.4	44.6	41.7
1971	49.7	49.0	50.1	49.6	49.6	47.3	51.2	51.0	52.1	43.5	43.5
1972	49.1	48.2	49.7	48.3	47.9	46.1	51.8	51.7	51.4	43.5	42.9

GRADE 7

YEAR	VOCABULARY	READING	LANGUAGE SKILLS				WORK-STUDY SKILLS			MATH SKILLS	
			SPELLING	CAPITALIZATION	PUNCTUATION	USAGE	MAPS	GRAPHS	REFERENCES	CONCEPTS	PROBLEMS
1965	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
1966	51.0	49.6	50.5	50.8	50.5	50.2	51.8	49.8	50.3	49.1	48.4
1967	51.0	49.0	50.3	50.8	51.1	49.3	51.8	50.3	50.6	48.8	47.7
1968	49.0	47.3	49.2	48.6	47.8	47.0	49.8	49.0	49.8	46.7	44.2
1969	48.8	46.9	48.9	47.2	46.3	46.0	49.5	49.0	49.3	44.5	42.2
1970	47.3	44.8	48.0	45.3	45.0	44.5	49.2	48.2	49.8	43.5	41.1
1971	47.1	44.8	48.0	45.9	45.7	45.0	49.3	48.2	49.1	44.0	40.5
1972	46.9	45.6	48.3	44.6	44.4	44.4	50.5	49.0	49.5	42.0	40.5

GRADE 8

YEAR	VOCABULARY	READING	LANGUAGE SKILLS				WORK-STUDY SKILLS			MATH SKILLS	
			SPELLING	CAPITALIZATION	PUNCTUATION	USAGE	MAPS	GRAPHS	REFERENCES	CONCEPTS	PROBLEMS
1965	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
1966	50.8	50.2	50.8	51.5	51.8	49.2	51.1	49.8	51.0	48.0	48.1
1967	49.8	49.1	51.0	50.4	50.9	48.2	50.3	48.8	50.3	46.5	46.3
1968	49.0	48.5	50.8	50.7	51.5	47.2	51.1	47.8	50.5	46.1	44.4
1969	48.7	47.4	49.7	49.1	49.7	45.8	49.8	47.6	50.0	44.0	42.8
1970	46.9	46.2	49.7	47.9	49.0	44.7	50.3	46.9	50.7	43.8	41.5
1971	47.3	45.7	50.4	49.1	49.5	45.1	50.5	48.1	51.0	44.0	41.5
1972	46.9	46.0	49.0	47.4	47.8	44.6	50.5	48.1	51.0	44.0	41.5

While again some basic skills in the early grades have improved over time, the results for the upper grades (above 4) are uniformly declining. The rise in Work-Study Skills in most grades has very little to do with basic achievement in Reading, Language, and Mathematics. Mathematics Skills seem to have suffered the most decline since 1965.

It is particularly troubling to observe achievement losses in Iowa, where isolation from much of the turmoil surrounding education in the past few years would have seemed more likely than in other places. It is remarkable that the drop in Iowa achievement parallels that in so many other areas which one is led to believe have such "different" problems. The trend in basic skills shows little evidence of any difference. Achievement is apparently falling throughout the country; only the parameters of the decline need to be determined.

MICHIGAN

The Michigan Educational Assessment Program has had a controversial history that will not be examined here. This program does administer a statewide testing program for pupils in grades 4 and 7 in public schools. Parochial school students do not participate. A specially developed instrument, the Standardized Michigan Educational Assessment Test, was developed to measure Mathematics, Word Relationships, Reading and the Mechanics of Written English. A special equating procedure is employed by the State Education Department that allows year-to-year comparisons of test scores so that it is possible to measure progress.* Scores are expressed in terms of the 1970 results which have a mean of 50 and a standard deviation of 10 (T scores).**

MEANS IN EQUATED STATE STANDARD SCORE UNITS, MICHIGAN

GRADE 4

	1970	1971	1972	1973
Reading	50.0	50.5	50.4	49.9
Mathematics	50.0	50.5	50.6	50.9
Mechanics of Written English	50.0	50.0	49.4	49.5
Word Relationships	50.0	50.6	49.0	48.6

GRADE 7

	1970	1971	1972	1973
Reading	50.0	49.4	50.1	49.6
Mathematics	50.0	50.0	50.0	50.3
Mechanics of Written English	50.0	49.6	49.4	49.2
Word Relationships	50.0	49.8	49.5	48.8

---

*For the statistical details of this equating procedure, see "The Equating Report: Year-to-Year Analysis of the Cognitive Tests of the Michigan Educational Assessment Program," Michigan Department of Education, March 1973.

**Report No. 3, "Detroit Schools' Standing on State Assessments 1970 through 1973," Department of Research and Development, Division of Curriculum and Educational Research, Detroit Public Schools.

Comparing the 1973 results with the 1970 results, it is seen that achievement has fallen in varying degrees in both grades in all subjects except Mathematics. The rise in grade 7 scores in Mathematics is particularly interesting since no other state for which we have data seems to have accomplished this over this time frame. In fact, achievement in Mathematics in the Detroit public schools for grade 7 has also increased over this time. A closer investigation of this desirable trend in Michigan appears to be warranted since it may be unique in the United States.

The most obvious drops in achievement for both grades are in Word Relationships. The losses overall in grade 7 have been rather consistent, i.e., except for Mathematics, each year is lower than the last. Grade 4 exhibits some increases over the time in question. This is perhaps again an example of the pattern that achievement in the United States has been declining faster in the higher grades. Broadly speaking, it is in grades 4 and 5 that achievement drops begin to appear.

MISSISSIPPI

The Mississippi State Department of Education has been administering the California Achievement Tests (1970 Edition) to grades 5 and 8 since 1970-71. Although participation is optional, about 87 percent of school districts participate. About 38,000 pupils are tested in each grade.

It is important to note in the following statewide summary that there was a change in the method of computing the statewide mean after the 1971-72 school year. Thus the increase in 1972-73 scores is the result of statistical factors and not necessarily the result of achievement gains.

MEAN STATEWIDE RAW SCORES, MISSISSIPPI

GRADE 5

	Reading	Mathematics	Language	Spelling
1970-71	39.03	53.88	52.41	16.71
1971-72	38.69	53.14	52.44	16.54
(Note change in computing mean)				
1972-73	40.7	56.2	55.1	17.3
1973-74	41.4	57.0	55.5	17.3

GRADE 8

	Reading	Mathematics	Language	Spelling
1970-71	41.56	44.44	59.80	16.48
1971-72	41.31	43.98	59.95	16.19
(Note change in computing mean)				
1972-73	42.2	45.9	61.5	16.5
1973-74	42.2	46.3	62.2	16.5

"Frequency Distribution Summary for California Achievement Tests, 1970 Edition," State of Mississippi, Department of Education

We can see slight drops in grades 5 and 8 from the 1970-71 to 1971-72 school years in all areas with the exception of Language. Disregarding the 1972-73 change because of scoring differences, we see that 1973-74 scores increased over the 1972-73 results. These changes may be said by some to be random changes which might be expected over time, but it should be noted that a truly random variation would be characterized by gains and losses for each particular test. When all tests go down and up together in a particular year, it is less likely to be random. The safest assumption would probably be that though Mississippi may not have started at the highest of academic achievement levels, it may be one of the few states that has been holding steady in achievement over the past four years.

NEBRASKA

Although we have been able to obtain scores for only a single year for Nebraska, the data are nonetheless significant. The Nebraska scores reflect one of the very few instances that a testing population has scored above the national norm.

NEBRASKA GRADE 11 SCORES, 1972

	Median Percentile Score in Terms of National Percentiles	Sample Size
Reading	51	11,242
Language Arts	52	11,217
Mathematics	62	11,204
Social Studies	50	11,179
Science	54	11,166

The testing instrument for these data was the Iowa Tests of Educational Development.* Note that Reading, Language Arts, and Social Studies are fairly close to the national average; only Mathematics is far above this norm. It is also important to note the number of pupils taking the test, only 11,000 compared to the 200,000 who typically take the eleventh grade tests in California.

NEBRASKA GRADE 7 SCORES, 1971

	Median Percentile Score in Terms of National Percentiles	Sample Size
Reading	61	11,225
Language Arts	59	11,201
Mathematics	60	11,221
Social Studies	58	11,200
Science	64	11,200

---

*"11th Grade Statewide Norms for the 1972 Fall Testing Program using the SRA Iowa Tests of Educational Development," State of Nebraska, Department of Education, March 1973.

NEW JERSEY

New Jersey administers tailor-made, criterion-referenced achievement tests to pupils in public schools. Grades 4 and 12 are tested and participation is mandatory. In 1972-73, approximately 250,000 students were included in the program. Only results from the November 1970 administration are presently available.*

It is fairly difficult to summarize the results of criterion-referenced tests. The only comparisons usually made consist of looking at the percentage of students who answer a particular question correctly versus the number expected to do so. The expectation is frequently determined by a group of educators and usually consists of simple comments such as "excellent," "good achievement," or "poor" on statewide percentage of students scoring correctly. This means that a different group of educators might rate a certain performance differently; the same educators may even rate achievement differently from one year to the next, depending on a host of other factors. It thus becomes impossible to compare the educational effectiveness of one state with another; it is difficult to compare a state with itself over time. In fact, the New Jersey presentation of results precludes comparison of one district with another. The only comparisons are among urban, suburban, rural and vocational regions. This makes evaluation of educational effectiveness difficult. For example, the official state report concludes that:

---

*For information and data on this program, see "EAP, State Report 1972-1973 Educational Assessment Program," New Jersey Department of Education, Division of Research, Planning, and Evaluation/Field Services.

> ...beginning fourth grades in the State of New Jersey generally perform well when results are related to the minimal primary reading skills stated as objectives noted in varied types of primary reading programs.

The report does not define "well" nor specify with whom students are compared. Since objectives are not quantitatively stated and evaluators may change, there is little hope of meaningful comparison. Studying examples of test problems and the number of correct responses to those problems is virtually the only way to understand such a program.

With respect to grade 4 multiplication and division, the summary results state:

> Particularly low achievement was noted throughout this cluster. There was some question by committee members as to whether the students are "ready" for these items at this grade level. It was assumed that achievement for this cluster would increase with advancing grade levels, but the present scores were uniformly low. There were very few differences noted across the geographic regions but the urban community type was consistently lower as compared to other community types.*

One cannot help assuming that achievement levels are not improving when the state questions whether today's fourth graders are ready for something that has normally been taught in the fourth grade for many decades. It is interesting to speculate on what would replace multiplication and division, were they to be removed from the grade 4 curriculum. The same trend appears to hold for pupils in grade 12: "Students showed a weakness in the area of multiplication and division of fractions and to a lesser extent in using least common denominators."** An example of this "weakness" is the following problem:

---

*"EAP, State Report 1972-1973 Educational Assessment Program."

***Ibid.*, p. 27.

Percent [one number] is of [another number].
(E.g., 4 is what percent of 16?)

In the statewide results, 53 percent answered incorrectly. The assumption in the grade 4 analysis of increasing achievement with advancing grade levels is thus contradicted by the empirical evidence.

NEW MEXICO

New Mexico has a statewide testing program for pupils in grades 1, 5, and 8.* In addition, records are kept of the score achieved by high school students on the American College Testing Program (ACT). Participation in the program is required of both public and non-public schools.

The trend in grade 1 IQ scores has gradually been increasing, as shown below.

GRADE 1

COMPARISON OF MEAN TEST SCORES ON OTIS-LENNON MENTAL ABILITY TEST, 1971-72 TO 1973-74

Group	1971-72	1972-73	1973-74	N-Count 73-74
Anglo	103.9	105.2	105.4	8,972
Spanish	90.0	92.7	94.0	8,349
Indian	83.6	85.1	86.1	1,802
Black	89.8	90.3	91.2	467
Asian American	-	-	102.9	61
Other	98.9	100.8	101.5	109
Non-Public	100.0	101.2	102.5	1,140
Public	95.7	97.3	98.3	19,434
Total State	96.0	97.6	98.5	20,574
National	100.0	100.0	100.0	-
Spanish Language Administration	-	84.0	87.7	229

The above table should be kept in mind when considering the trend in academic ability for grade 5 pupils. It is important also to note that in the following tables a change in testing instruments in 1971-72 makes comparison impossible across the entire time frame.

---

*All data in this section from "Analysis of Standardized Testing Results 1973-1974," State Department of Education, New Mexico, April 1974.

GRADE 5

ACADEMIC APTITUDE SCORES, 1969-70 TO 1973-74

Group	1969-70	1970-71	1971-72*	1972-73**	1973-74
Anglo	111	109	103	-	102
Spanish	96	95	91	-	90
Indian	92	91	85	-	85
Black	92	93	89	-	88
Asian American	-	-	-	-	96
Other	103	104	98	-	98
Non-Public	NA	108	101	99	101
Public	102	102	96	96	95
National	100	100	100	100	100

*Note change in testing instruments.

**Academic aptitude scores for ethnic groups were not provided for school year 1972-73.

GRADE 5

TOTAL BATTERY ACHIEVEMENT SCORE AND NATIONAL REFERENCE GROUP, 1969-70 TO 1972-73 (IN MEAN GRADE EQUIVALENT)

Group	1969-70	1970-71	1971-72*	1972-73
Anglo	5.5	5.5	5.3	5.3
Spanish	4.3	4.3	4.3	4.3
Indian	3.7	3.9	3.8	3.8
Black	3.9	4.2	4.1	4.1
National	5.1	5.1	5.1	5.1

*Note change in testing instruments.

There has been an increase over time of grade 5 performance for Blacks and a decline for Anglo students.

The ability and achievement results for grade 8 students appear below:

GRADE 8

ACADEMIC APTITUDE SCORES*
1971-72 TO 1973-74

Group	1971-72	1972-73**	1973-74
Anglo	103	-	103
Spanish	91	-	92
Indian	85	-	86
Black	88	-	90
Asian American	-	-	99
Other	100	-	100
Non-Public	100	102	103
Public	97	97	96
State Total	-	-	97
National	100	100	100

*Based on a standard scale with a range of 1-150, a mean of 100, a standard deviation of 16.

**Academic aptitude scores for ethnic groups were not provided for school year 1972-73.

GRADE 8

TOTAL BATTERY ACHIEVEMENT MEAN GRADE EQUIVALENT
1971-72 TO 1973-74

Group	1971-72	1972-73	1973-74
Anglo	8.2	8.2	-
Spanish	6.2	6.4	-
Indian	5.4	5.5	-
Black	5.8	6.1	-
Other	7.7	7.6	-
Under 500	6.8	7.3	-
501-1000	6.4	6.5	6.5
1001-5000	6.6	6.7	6.6
Over 5000	7.4	7.4	7.1
Non Public	7.6	7.7	7.6
Public	7.2	7.2	7.1
Total			7.1
National	8.1	8.1	8.1

It is seen that academic aptitude for grade 8 (first table, p. A-33) has apparently held steady for Anglo pupils and is increasing for various minority groups. It is also interesting to note the drop in ability for public school pupils and the corresponding gain for non-public schools. There has been a drop in public school achievement (second table, p. A-33). There is also an achievement increase for minority group students but none for Anglo students.

Scores of New Mexi[illegible]tudents on the ACT follow on page A-35.

NEW MEXICO, ACT MEANS

New Mexico

YEAR	N	ENGLISH			MATHEMATICS			SOCIAL STUDIES			NATURAL SCIENCE			COMPOSITE		
		BOY	GIRL	TOTAL	BOY	GIRL	TOTAL	BOY	GIRL	TOTAL	BOY	GIRL	TOTAL	BOY	GIRL	TOTAL
1967-68	8,239 B - 4,348 G - 3,891	17.5	19.5	18.5	19.6	17.0	18.4	19.8	18.8	19.3	21.5	19.9	20.3	19.7	18.7	19.2
1968-69	7,843 B - 3,947 G - 3,896	17.9	19.5	18.7	20.2	18.0	19.1	20.2	18.9	19.6	21.7	19.2	20.5	20.0	19.1	19.5
1969-70	8,771 B - 4,403 G - 4,368	17.2	18.8	18.0	20.4	18.0	19.2	19.7	18.1	18.9	21.5	19.7	20.6	19.8	18.8	19.3
1970-71	9,091 B - 4,478 G - 4,613	16.4	18.2	17.4	19.3	17.0	18.1	18.2	17.4	17.8	21.2	19.3	20.3	18.9	18.1	18.5
1971-72	9,107 B - 4,501 G - 4,606	16.3	17.9	17.1	19.3	16.7	18.0	18.2	17.2	17.7	21.3	19.1	20.2	18.9	17.9	18.4
1972-73	8,701 B - 4,151 G - 4,550	16.8	17.7	17.2	19.5	16.5	18.0	18.1	16.2	17.1	21.6	19.1	20.3	19.1	17.5	18.3
								NATIONAL NORMS								
1970-73	2,647,873 B-1,321,470 G-1,326,403	16.7	18.6	17.7	19.7	17.7	18.7	18.7	17.9	18.3	21.2	19.5	20.4	19.2	18.6	18.9

Here too there has been an overall decline since 1967-68. The largest drop appears to be in the Social Sciences. This drop in New Mexico is compared with the nationwide decline in SAT scores and the general decline in national ACT scores.

ACT
(NATIONAL)

	1967-70	1970-73	Difference
English	18.2	17.7	- .5
Mathematics	19.0	18.7	- .3
Social Studies	19.4	18.3	-1.1
Natural Science	20.1	20.4	.3
Composite	19.3	18.9	- .4

The official report of the New Mexico Department of Education notes:*

> This corresponds to the finding that scores on the Scholastic Aptitude Test, another widely used college entrance test, are dropping nationwide. This phenomenon was a topic of discussion at a conference of directors of state testing programs held in Princeton, New Jersey, on November 4 and 5, 1973. It was reported that the Minnesota College Testing Program mean scores had experienced an increase until approximately 1961-62 where they plateaued until about 1969-70 when the mean scores began dropping approximately 1/2 raw score point annually. In addition, it has been noted [also at the Conference of Directors of State Testing Programs] that national scores on the reading and math portions of the Iowa Tests of Basic Skills are showing "substantial drops," particularly in the higher grades..

---

*"Analysis of Standardized Testing Results 1973-1974," p. 32.

NEW YORK STATE

The State Education Department of New York has administered several testing programs which attempt to measure a wide range of skills and abilities. While most of these testing programs are not designed to give a continuing score scale for performance over the years, the Pupil Evaluation Program (PEP) does allow a time series analysis. PEP is a fall testing program required of all New York State pupils in grades 3, 6, and 9 and consists of reading and mathematics achievement tests.* The program was initiated in October 1965 and data on PEP scores are available since 1966. According to a New York State description the program has value as a "statewide product evaluation and continuous inventory system." Although the test forms have been revised since 1966, the newer norms were obtained by equating raw scores on the revised tests to those on the original tests, using the equi percentile method.** The original PEP norms are based on the 1966 statewide results. Thus it is possible to compare students of recent years with 1966 students as far as reading and mathematics achievement is concerned.

The Bureau of Pupil Testing and Advisory Services provides percentile ranks of median raw scores for PEP based on the definition that 1966 pupils would serve as the median comparison group. Students in 1966 therefore will fall at the 50th percentile in each grade and for each test. The results are shown below for grades 3, 6 and 9.

---

*For more detailed information on the Pupil Evaluation Program see "New York State Pupil Evaluation Program, School Administrator's Manual," The State Education Department, Bureau of Pupil Testing and Advisory Services, October 1973.

**For a mathematical description of the equi percentile method, and other score equating considerations, see the Michigan Education Departments booklet "The Equating Report," March 1973.

GRADE 3
(PERCENTILE RANKS OF MEDIAN RAW SCORES)

	1966	1967	1968	1969	1970	1971	1972	1973
Reading								
Public	47	47	49	48	46	46	48	NA*
Nonpublic	57	58	57	58	56	57	58	NA
Total State	50	50	51	50	49	49	50	50
Mathematics								
Public	49	49	52	52	51	52	53	NA
Nonpublic	54	55	56	61	59	59	60	NA
Total State	50	51	53	54	53	53	54	54

*Not available.

GRADE 6
(PERCENTILE RANKS OF MEDIAN RAW SCORES)

	1966	1967	1968	1969	1970	1971	1972	1973
Reading								
Public	47	46	47	44	42	41	41	NA*
Nonpublic	57	56	56	55	53	53	53	NA
Total State	50	49	49	47	44	44	44	44
Mathematics								
Public	48	45	46	42	39	39	39	NA
Nonpublic	54	51	50	51	50	49	49	NA
Total State	50	47	47	44	42	41	41	39

*Not available.

GRADE 9*
(PERCENTILE RANKS OF MEDIAN RAW SCORES)

	1966	1972	1973
Reading			
Public	NA**	40	NA
Nonpublic	NA	59	NA
Total State	50	42	41
Mathematics			
Public	NA	38	NA
Non Public	NA	58	NA
Total State	50	41	39

*Data for intervening years not available from New York State Education Department.

**Not available.

Overall, there has been an upward trend in grade 3 Mathematics test scores and no significant changes in the Reading scores.

The time series trend in the higher grades is obvious enough. Between 1966 and 1973 grade 6 lost 6 Reading and 11 Mathematics percentile points. The grade 9 results are more bleak in that Reading fell by 9 points and Mathematics by 11 points. An important statistical feature of the trend is its monotonicity. While one might expect some noisey variations to cause increases in the year-to-year trend, none seems to be present. Grade 6 statewide scores have never increased in either Reading or Mathematics since 1966. It should be recalled that PEP scores cover virtually all New York pupils.

There are some special breakdowns of the data by community type and by percentages scoring below an established Statewide Reference Point. For different communities the trend in average percentile test scores for grade 6 has been as follows:

GRADE 6

	1966	1967	1968	1969	1970	1971	1972	1973
Reading								
New York City	37	36	37	34	32	32	32	NA*
Large Cities	47	44	42	40	38	35	35	NA
Medium Cities	54	52	51	48	47	46	45	NA
Small Cities	53	52	52	50	48	47	47	NA
Vl & Lg Central	59	58	57	56	54	53	53	NA
Large Rural	55	53	54	51	51	49	48	NA
Small Rural	52	50	50	50	48	47	46	NA
Total State	50	49	49	47	44	44	44	44
Mathematics								
New York City	34	30	32	30	28	30	29	NA
Large Cities	49	48	46	39	37	33	33	NA
Medium Cities	51	50	48	46	43	43	42	NA
Small Cities	54	52	51	48	46	44	43	NA
Vl & Lg Central	58	56	54	54	51	50	49	NA
Large Rural	59	54	53	51	50	47	45	NA
Small Rural	59	56	54	52	50	47	45	NA
Total State	50	47	47	44	42	41	41	39

*Not available.

As far as the trend of grade 6 Reading and Mathematics achievement is concerned, New York City pupils have had the least achievement loss among all community types considered. Achievement in New York State for grade 6 has fallen faster in the suburban areas than it has in the New York City school system. Of course the New York City scores are the lowest and the fact that these tests are multiple choice may mean that New York City public schools (particularly in Mathematics), may be approaching the lowest point possible on these tests.

The New York State Education Department also issues the yearly percentage of pupils in each grade that score below a certain statewide standard. This standard was defined to be the lower 23 percent scores according to the 1966 administration of the PEP test. The percentage of students annually falling into this is used for policy making and resource allocation purposes. The statewide reference points do not change from year to year so that a comparison over time is possible just as it was for the statewide median raw score percentiles. Therefore, they both provide baselines against which the state can measure educational effectiveness over time. In grade 3 Reading, for example, if fewer pupils score below the Statewide Reference Point in subsequent years than in 1966, this reduction indicates improvement in the reading skills of grade 3 pupils.

A glance at the percent of pupils in this "below average achievement range" from 1966 to 1972 reveals the same trend as in the statewide median percentile scores.

PERCENT OF PUPILS SCORING BELOW AVERAGE
IN STATEWIDE ACHIEVEMENT RANGES

	1966	1967	1968	1969	1970	1971	1972
Grade 3							
Reading	23	23	22	23	24	24	23
Mathematics	23	22	20	20	19	19	18
Grade 6							
Reading	23	24	24	25	27	27	27
Mathematics	23	25	25	27	29	29	30
Grade 9							
Reading	NA*	NA	NA	NA	NA	NA	30
Mathematics	NA	NA	NA	NA	NA	NA	32

*Not available.

Grade 3 is apparently improving over time and grade 6 is declining. While no time series data are available for grade 9, the nearly universal pattern of higher grades doing worse is present; 1966, 23 percent; 1972, 30 and 32 percent.

It is important to keep in perspective the reason for the growth or decline of percentages of pupils falling below the Statewide Reference Point. The fact that there have been increases in grade 6 target groups should not be viewed in isolation from the effectiveness of the rest of the state educational system. Viewed alone one might conclude that the problem is one of special groups of students performing poorly for one reason or another. However, when looked at with the decline in the statewide median scores it is apparent that the increase in percentage of the priority group is caused more by a gradual diminution in quality of the entire system. It is likely that there is a greater percentage of grade 6 underachievers because there is a greater percentage of students scoring lower on the average. The entire distribution of grade 6 test scores has been shifting downward, not just those from any particular achievement level. Discussions centering on resource allocation for pupils below the Statewide Reference Point must consider the tendency of the entire system to deteriorate in achievement, which can be seen if one looks at the percent of pupils scoring below the Statewide Reference Point over time broken down by community type.

The fact that achievement loss is centered on all types of communities makes it difficult to accept the notion that any local changes in population or racial makeup of communities is causing the drop.

PERCENT OF GRADE 6 PUPILS SCORING BELOW STATEWIDE REFERENCE POINT, 1966-1972

	1966	1967	1968	1969	1970	1971	1972
Reading							
New York City	36	36	36	39	40	40	39
Large Cities	23	25	28	30	32	36	36
Medium Cities	19	19	20	22	24	24	25
Small Cities	17	18	18	20	22	22	22
Vl & Lg Central	13	14	14	16	17	17	17
Large Rural	16	17	17	19	19	20	21
Small Rural	18	18	19	19	20	22	23
Mathematics							
New York City	38	41	40	42	44	42	42
Large Cities	21	22	25	30	33	37	37
Medium Cities	20	20	22	23	26	27	28
Small Cities	16	18	18	20	22	24	25
Vl & Lg Central	13	15	16	16	19	20	20
Large Rural	13	16	17	18	20	21	23
Small Rural	13	15	16	17	19	21	22

In summary, following the general trend of the lower grades doing better than the upper grades, grade 3 achievement in New York State has been holding steady in Reading and had been improving in Mathematics since 1966. The higher grades have been steadily declining in achievement with grade 9 doing worse than grade 6. Achievement has fallen fastest outside New York City, and contrary to the grade 3 trend, Mathematics achievement has fallen faster than Reading in grades 6 and 9.

NORTH CAROLINA

The Division of Research in the North Carolina Department of Instruction administers a statewide testing program of pupils in grade 6. Although school participation in the program is not required, 100 percent of eligible schools participated. About 12,000 grade 6 students were tested as a representative probability sample of all sixth graders.

Test results are only available for a single year (1971-72) so there is no way to study North Carolina's educational system over time. The testing instruments used were the Iowa Tests of Basic Skills and the Lorge-Thorndike Intelligence Test.*

Test	Median State	Median Nation	Averages in North Carolina White	Averages in North Carolina Nonwhite
IQ	94.4	100	98.6	85.1
Reading	57	67	63.0	49.4
Vocabulary	57	67	61.5	46.6
Language Skills	58	66	63.6	50.8
Mathematics	58	66	63.3	52.1

North Carolina is below the national median in all areas of achievement.

Some final statistics of North Carolina reveal the growth of innovative practices within their schools. While there has been a national trend to most of these it is rare that reliable quantitative estimates of their recent growth are available.

---

*State Assessment of Educational Progress in North Carolina 1971-72, Division of Research, State Department of Public Instruction, December, 1972.

PERCENTAGE OF SCHOOLS WITH PROGRAMS/INNOVATIONS

Program/Innovation	1968-69	1969-70	1970-71	1971-72
1. Using a competitive grading system (A-B-C)	78.0%	77.3%	70.1%	69.6%
2. Using a non-competitive grading system	15.2	21.3	35.6	40.6
3. Team teaching for Math	13.8	20.2	28.6	34.9
4. Non-graded classes	8.4	12.7	14.3	16.6
5. Open classroom concept	4.1	6.6	13.6	28.8
6. Teachers using behavioral objectives	27.7	29.5	45.1	54.9
7. Special resource centers (other than the library)	23.8	29.3	42.2	54.9
8. School has regular meeting advisory committee of students	11.6	13.8	21.3	27.0
9. Instructional media ("listening" centers, single concept film loop, cassette tapes, T.V., etc.)	56.9	66.7	81.2	88.2

OHIO

The Ohio Survey Test program is administered to pupils in grades 4, 6, 8, and 10. Participation by the schools is optional but most schools take part in the program. Data for grades 8 and 10 are shown below. Grades 4 and 6 are not included because of difficulties in obtaining interpretations. The interested reader may consult the official state reports for the raw data from all tests for all years.*

GRADE 8

	1968(Jan.)	1968(Nov.)	1969(Nov.)	1970(Nov.)	1972(Jan.)
Total Ability	59.9	59.4	59.0	59.2	58.6
Reading	38.5	37.9	37.5	37.1	NA*
English	51.5	50.6	50.1	49.5	48.8
Mathematics	27.0	26.5	26.2	25.8	25.2

GRADE 10

	1968(Jan.)	1968(Nov.)	1969(Nov.)	1970(Nov.)	1972(Jan.)
Total Ability	61.4	60.5	61.1	60.3	60.1
Reading	37.7	37.2	36.9	36.4	NA*
English	49.9	49.3	48.8	47.9	46.8
Mathematics	28.4	27.9	27.5	27.1	26.7

*Not available.

We see in both grades the loss over time of skills in the basic subject areas. Test changes were made in the 1972-73 administration so that continuation of the trend is impossible to interpret. Note that for both grades achievement consistently falls off--even when there is an increase in total ability.

---

*Statewide Reports--Ohio Survey Tests, 1968 through 1973, Ohio Testing Services, State Department of Education.

RHODE ISLAND

The Rhode Island Department of Education administers the Iowa Tests of Basic Skills and the Lorge-Thorndike Intelligence Test to pupils in grades 4 and 8. Participation of all studens is required by law. Only data for the October 1972 administration are available.

AVERAGE ACHIEVEMENT SCORES (IN NATIONAL PERCENTILE)

GRADE FOUR

Vocabulary	45
Reading	46
Mathematics	46
Total IQ	100.9
Language	49

GRADE EIGHT

Vocabulary	50
Reading	53
Mathematics	53
Total IQ	102.1
Language	55

A Report of Achievement Test Information, Fall 1972, State of Rhode Island, Department of Education, October 1973

Although grade 4 scores are uniformly below the national norm, grade 8 scores are above it, a phenomenon which seems to be the reverse of the general trend of lower grades doing better than upper grades in recent years. Unfortunately data for one year do not allow us to assess the effectiveness of Rhode Island's schools over time. However, it is notable that these scores are above the national average.

SOUTH CAROLINA

South Carolina has a statewide testing program for grades 4, 7, 9 and 12. In 1972-73, all fourth and seventh grade students in participating schools and a sample of ninth and twelfth grade students were tested. Approximately 85 percent of eligible students were tested, i.e., about 105,000 pupils.

The instruments used for grades 4 and 7 were the Comprehensive Tests of Basic Skills and the Short Form Test of Academic Aptitudes. Grades 9 and 12 took the Iowa Tests of Educational Development.

SOUTH CAROLINA STATEWIDE TESTING PROGRAM RESULTS: PUPILS BELOW THE NATIONAL MEDIAN*
(PERCENT)

	Grade 4	Grade 7	Grade 9	Grade 12
Reading	69.6	73.0	71.7	67.2
Language	71.3	71.9	67.1	63.5
Mathematics	72.9	82.9	67.7	64.9
Social Studies	NT**	NT	66.7	68.2
Science	NT	NT	69.4	67.5

*National Median = 50.0%.

**Not tested.

Initial Report of the Fall 1972 South Carolina Statewide Testing Program, v. 1, no. 1, May 1973, State Department of Education

Unfortunately, South Carolina changed tests in 1973 from CTBS Form Q to CTBS Form S. However, it is more than evident that South Carolina is substantially below the national average in all grades for all achievement areas. Grade 7 Mathematics appears to be the area most in need of improvement. One feature that is evident is that, unlike most other states, South Carolina has a fairly even distribution of underachievers across the grades.

SOUTH DAKOTA

South Dakota has had a yearly statewide testing program for many years. Grades 9 and 11 take the Iowa Tests of Educational Development (ITED).* Although participation is not required in the program, about 95% of the eligible schools participate.

Beginning in the 1970 administration, ITED was revised and renormed. Consequently, the scores for 1970, 1971, and 1972 are not really comparable to the previous data. However, they are comparable to themselves.

The scores are presented as the mean percentile score in terms of a national average.

GRADE 9

	1960	61	62	63	64	65	66	67	68	69	70	71	72
Social Studies	61	68	68	67	67	67	67	59	59	59	59	57	47
Natural Sciences	69	75	75	56	56	56	62	56	62	62	62	54	54
Correctness of Expression	66	66	66	61	68	68	68	68	68	68	-	-	-
Quantitative	75	75	75	75	75	75	80	69	75	75	69	59	59
Reading Lit.	66	66	66	61	61	61	61	61	61	61	-	-	-
Vocabulary	59	66	66	57	57	57	63	63	57	57	57	53	49

---

*Information available from Guidance and Counseling Service, Division of Elementary and Secondary Education, Pierre, South Dakota.

GRADE 11

	1960	61	62	63	64	65	66	67	68	69	70	71	72
Social Studies	62	62	67	65	65	59	65	65	59	59	59	50	50
Natural Sciences	59	59	65	60	60	60	60	60	65	60	60	54	54
Correctness of Expression	57	57	57	55	55	63	63	63	63	63	-	-	-
Quantitative	68	68	68	68	68	68	68	68	72	68	64	58	58
Reading Lit.	57	63	63	55	55	55	55	60	55	55	-	-	-
Vocabulary	56	56	63	57	57	57	57	57	57	57	57	47	47

The interesting feature of these data is their consistency--up to 1970. Notice the last three years show general declines. These scores are comparable since they were made on the same test. Although grade 11 scores for 1972 are the same as in 1971, they are significantly below the 1970 scores. Over the final three years, the largest drops have been in grade 9 Quantitative (Mathematics) and grade 11 Vocabulary. Between 1960 and 1967 for grade 11 there appears to have been an increase in achievement in all areas except Mathematics which held its own. This shows the importance of a time series look at achievement: the longer sequences demonstrate that in the early 1960s, gains in achievement were more usual. Note also that South Dakota is still above the national average in a majority of areas.

TEXAS

The Texas Education Agency "Needs Assessment Program" tests sixth grade pupils in Reading and Mathematics.* As in the case of New Jersey, the tests are criterion referenced, and data are available only for 1971. Thus, it is not possible to compare Texas with itself over time or even with other states or the nation. However, the test results do point to the internal strengths and weaknesses of educational achievement.

The findings can briefly be summarized for Reading as follows:

- The performance of girls was superior to that of boys, particularly on those objectives concerned with study skills.
- On all objectives the white students outperformed both the Mexican-Americans and the Negroes.
- The Mexican-Americans outperformed the Negroes.
- Suburban communities had the highest percentage of achievers.
- Cities of over 500,000 had the lowest percentage of achievers.

The findings for Mathematics were identical.

An example of the kind of math problems given on the test is the following:

$$\begin{array}{r} 20{,}408 \\ -\ \underline{19{,}535} \end{array}$$

Only 57 percent of the grade 6 pupils could solve this subtraction. Fraction seemed to be a particular weakness of the students, e.g., only 1 percent of the sixth graders could solve the following problem:

---

*See "Sixth Grade Reading - A Needs Assessment Report" and "Sixth Grade Mathematics - A Needs Assessment Report," Texas Education Agency, 1972.

$$\frac{7}{8} \div 3\frac{2}{3} = ?$$

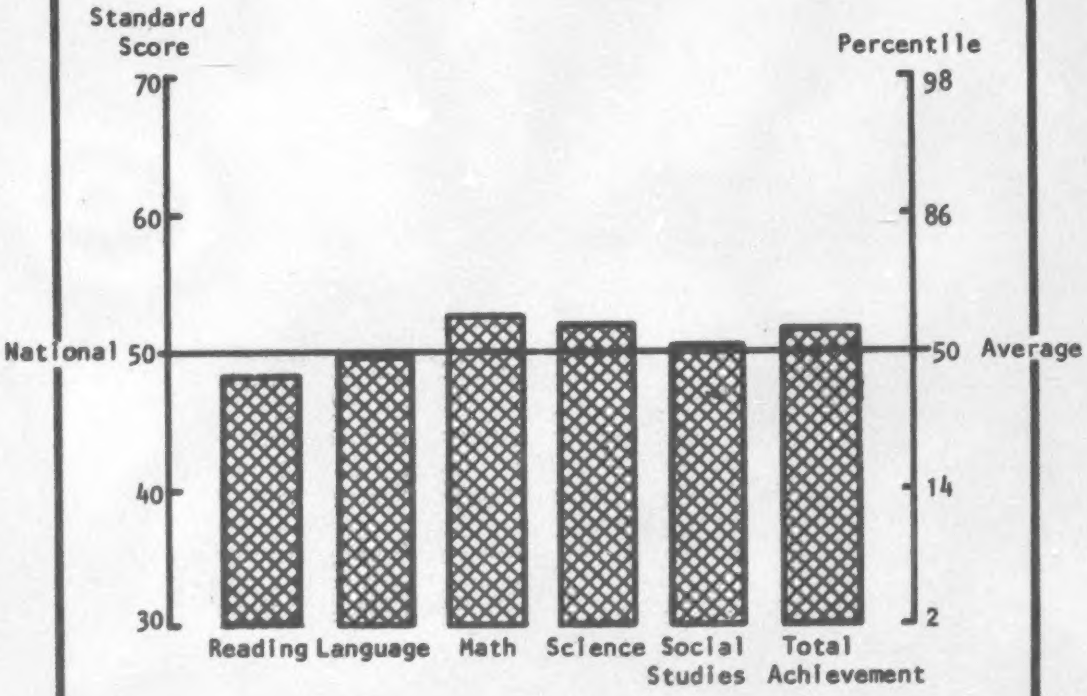
The difficulty in summarizing criterion-referenced tests is the tendency to pick out the highlights. Examining those problems where students scored particularly high and low does not reveal the totality of what these tests were designed to measure. However, students seem to score higher on "conceptual areas" than they do on areas involving computationaly skill.

UTAH

Utah does not have a statewide testing program. However, the performance of Utah pupils is reflected in a publication that compared Utah with the rest of the nation.*

All grades are considered and are lumped into this assessment. The result is shown below.**

COMPARISON OF ACHIEVEMENT SCORES FOR UTAH STUDENTS WITH NATIONAL AVERAGES. (1971)



---

*"How Good Are Utah Schools," Utah State Board of Education, 1971.

***Ibid*., p. 27.

Since there is no breakdown by grade, it is impossible to detect differences by grade level. However, an earlier 1967 study in Utah found that Utah pupils compared better nationally in the early grades than the later grades. The 1971 data show Utah students above the national average in most areas. It is impossible to conclude very much about Utah for the past few years due to the lack of recent data.

WEST VIRGINIA

West Virginia has a State-County Testing Program for students in grades 3, 6, 9, and 11. Approximately 119,000 pupils were tested in 1972. Schools are required to participate in the program. The instrument used in all grades was the STS Educational Development Series.

	1970-1971	1971-1972	1972-1973	1973-1974
GRADE 3				
Total Ability	3.6	3.5	3.6	3.5
Basic Skills	3.6	3.6	3.6	3.5
National Norm	3.7	3.7	3.7	3.7
GRADE 6				
Total Ability	6.5	6.5	6.5	6.5
Basic Skills	6.4	6.4	6.4	6.3
National Norm	6.7	6.7	6.7	6.7
GRADE 9				
Total Ability	8.9	8.8	8.8	9.0
Basic Skills	8.9	8.8	8.7	8.7
National Norm	9.2	9.2	9.2	9.2
GRADE 11				
Total Ability	10.9	10.9	11.1	11.0
Basic Skills	11.1	11.1	11.1	11.1
National Norm	11.2	11.2	11.2	11.2

West Virginia Department of Education, Division of Guidance, Counseling, and Testing: Eleventh Report: State-County Testing Program; mimeographed computer printouts, State-County Testing Program

In West Virginia there is no strong trend up or down in achievement test scores overall. Grade 9 appears to have been falling in the area of basic skills while increasing in academic ability. Grade 3 has had random changes in ability and a small decline in basic skills achievement in 1973-74. Grade 12 has been holding steady in achievement and improving in ability.

In the higher grades, ability seems to have been improving, with achievement either holding steady or slightly declining.

Grade 11 is only below the national norm by a slight amount. It is much closer to this "national average" than almost all other states. When one considers the popular notions about education in Appalachia, this is somewhat surprising. The fact that grade 11 achieves more than Grade 6 or grade 9 is also surprising since the reverse tendency seems to hold in most other areas.

PHILADELPHIA

The School District of Philadelphia administers a testing program for the city's public school students. Tests were given for grades K and 1 for the first time in 1972 and for grades 2 through 8 since 1968. Grades 3 through 8 have been taking the Iowa Tests of Basic Skills* and year-to-year comparisons are possible. The results for the ITBS in grades 3 through 8 are shown below expressed in terms of the national percentile rank of the Philadelphia public school median score. Tests were not given in 1973 due to a teachers' strike in the early part of the year.

Again we see the steady pattern of the lower grades (3 and 4), with the higher grades exhibiting significant and steady declines in achievement. In fact the critical turning point seems to be well defined for these data. The upper grades have losses about equal in Reading and Mathematics.

The striking feature about grade 7 achievement in Reading and Mathematics is its remarkably low level. In 1972, for example, the median Philadelphia public school Arithmetic score was at the 13th percentile. This means that half of these students fell below the national 13th percentile. For grade 8 there is a sharp decline in 1969 scores compared to those of 1968 which has never been recovered.

---

*For a detailed description of the Iowa Tests of Basic Skills see A.N. Hieronymus and E.F. Lindquist, Manual for Administrators, Supervisors, and Counselors, Levels Ed., Forms 5 & 6, Iowa Tests of Basic Skills (Boston: Houghton Mifflin, 1974).

PHILADELPHIA CITY-WIDE TESTING PROGRAM
IOWA TESTS OF BASIC SKILLS
NATIONAL PERCENTILE RANK OF MEDIAN SCORE*

	Reading	Vocabulary	Total Language	Total Work Study	Arithmetic
Grade 3					
1968	29	30	35	-	32
1969	29	30	35	-	30
1970	29	30	35	-	32
1971	29	33	35	-	32
1972	29	35	35	-	32
Grade 4				-	
1968	21	22	22	-	22
1969	21	22	22	-	22
1970	21	22	27	-	22
1971	21	22	25	-	22
1972	21	24	25	-	22
Grade 5					
1968	22	23	22	21	23
1969	22	26	24	21	20
1970	16	21	22	14	18
1971	16	19	22	14	16
1972	18	23	22	17	18
Grade 6					
1968	22	27	23	22	21
1969	20	27	24	22	19
1970	17	23	23	18	15
1971	14	21	19	16	13
1972	17	24	21	18	15
Grade 7					
1968	22	26	26	21	16
1969	22	25	25	23	18
1970	21	25	25	21	15
1971	16	20	20	18	13
1972	16	23	23	20	13
Grade 8					
1968	23	28	28	25	18
1969	20	24	24	21	16
1970	20	22	22	21	16
1971	17	22	22	20	13
1972	17	22	22	21	14

*National norm for all grades in all areas is 50.

1971-1972 Philadelphia City-Wide Testing Program, Spring 1972 Achievement Testing Program, City Performance Distribution and and Medians, Office of Research and Evaluation, Division of Testing, School District of Philadelphia, 72-146-G, June 1972